



Forex E-BOOK

Intermediate - Advanced





MATURITY OF THE TREND

LONG TERM TREND

a trend that has been in effect for 1 year or more . This definition is mostly valid for stock markets. In Forex markets, it refers to a period of 6 months or longer.

MEDIUM TERM TREND

In stock markets, it is accepted as 3-6 months. In Forex markets, it is generally a period of up to 3 months.

SHORT TERM TREND

In stock markets, it is considered to be between 3 weeks and 3 months. In Forex markets, it is a period of up to 2-3 weeks.

HOW TO DETERMINE THE IMPORTANCE OF A TREND?

There are two factors that determine the Importance of a trend line. These;

- length of time it lasts
- How many times has it been tested?

For example; A trendline that has been going for 6 months is more important than a trendline that has been going for just 4 weeks.



As the importance of the trend line increases, its reliability increases and its breakage causes the more significant and sharp price movement.



METHOD TO FOLLOW IN CASE OF SMALL BREAKS

Sometimes prices may appear to have broken the trend line within the period we selected. However, they close in the same direction as the trend and may be in a suspicious position.

There is no definitive method to follow in such cases. Sometimes this small break is overlooked; Sometimes, to be cautious, a new trend line is drawn, shown as the second line, as in the chart below, and it can be monitored which trend line the prices will stand on next time they come back.





HOW TO REALLY BREAK THE TREND LINE ? (HE)

- Percentage break criteria (such as 3%, 5%, 10%)
- two day rule

The choice of breakout criteria depends on each investor's risk level and the duration of a trend line they follow. For short-term trades, it will be useful to apply the 3% criterion and the 2-day rule together.

PERCENTAGE BREAKDOWN CRITERIA

uptrend line of the asset specified in the example below exceeds 7.50 and closes 3% below this line;

$$7.50 \times 0.03 = 0.225 \quad 7.50 - 0.225 = 7.27$$

According to the percentage rule, the trend is assumed to be broken.



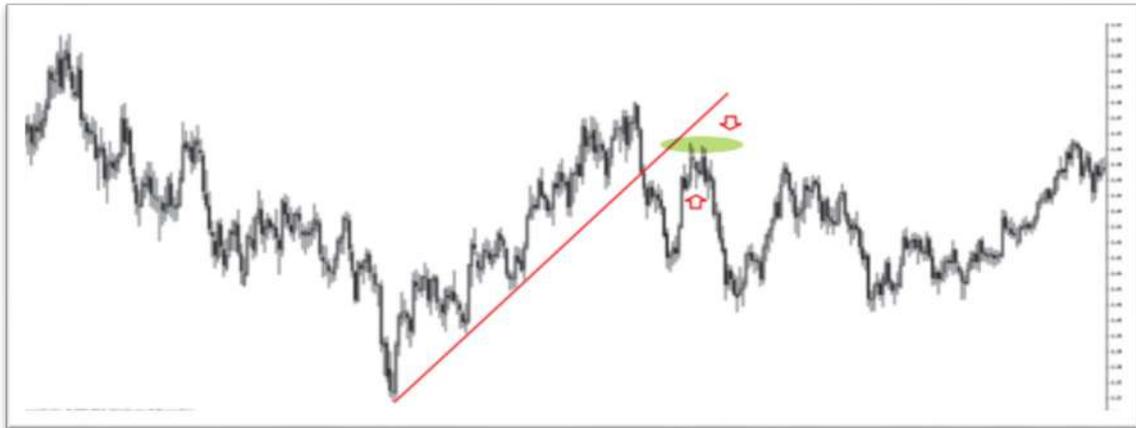
TWO DAY RULE

In the two-day rule, in order for a trend line to be broken, prices must close on the other side of the trend line for two consecutive days. To break a rising trend, prices must close above the trend line for two consecutive days to break a falling trend.

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RETURN MOVE IN TRENDS

Once the rising trend is broken, if prices attack this trend line again; This line is generally perceived as a resistance point.



If the prices move downwards again after the downward trend is broken once;
This time he can take on a line support role.



BEAR TRAP

A false sell signal is when prices continue their upward trend after breaking the support level in a rising trend.



BULL TRAP

A false buy signal is the continuation of the falling trend after the prices break the resistance level in a falling trend.



FIBONACCI ANALYSIS METHODS

Fibonacci Analysis is one of the most used methods in technical analysis. It is based on a set of numbers developed by the famous mathematician Leonardo



Fibonacci, who lived in Italy in the 1200s.

Fibonacci discovered the Fibonacci number sequence in his book "Liber Abaci" in 1202, based on the reproduction of rabbits. A sequence is a sequence of numbers resulting from the addition of each number with the previous number. Well;

$1+1 = 2$... $1+2 = 3$... $2+3=5$... $3+5=8$... $5+8=13$... Fibonacci numbers 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, ... and so on. The golden ratio (1.618) is formed by dividing each number by the previous number in the further elements of the sequence. The concept of the golden ratio appears in science, art and many areas of life. Therefore, the golden ratio is also used in price movements in the financial market. Fibonacci ratios are used at support and resistance points, peaks and bottoms.

The rates used in the Fibonacci technical analysis method are 0.236, 0.382, 0.500, 0.618, 0.764. However, the general usage in this analysis method can be said to be 0.382, 0.500, 0.618. The lines drawn from these points are generally seen as support and resistance points.

Fibonacci Retracement (Fibonacci Retracement Levels)

It is the most used Fibonacci analysis method in technical analysis. Fibonacci coefficients are used to determine the support and resistance points between the highest and lowest price levels of a financial instrument in both upward and downward trends. Fibonacci coefficients are generally used to determine correction levels. These levels are 23.6 - 38.2 - 50.0 - 61.8 - 76.4. However, the healthiest results are given by ratios of 38.2 - 50.0 - 61.8. These rates are a remarkable indicator of the levels to which the market in a certain trend can retreat. This analysis method gives better results in the medium and long term.



Fibonacci Fans

Fibonacci fans are used to determine the correction levels of the trend in rising and falling trends. Fibonacci fan lines are created by drawing a line from the bottom of a rising trend to the nearest peak or from the peak of a falling trend to the nearest bottom. Fibonacci fans can give retracement lines in prices.





Fibonacci Expansion

Fibonacci expansion is a tool that shows which target levels can be tested in order to determine the exit level of the financial instrument in open positions. It is frequently used to detect resistance and support points. Generally, levels of 61.8 - 100 - 161.8 are observed.

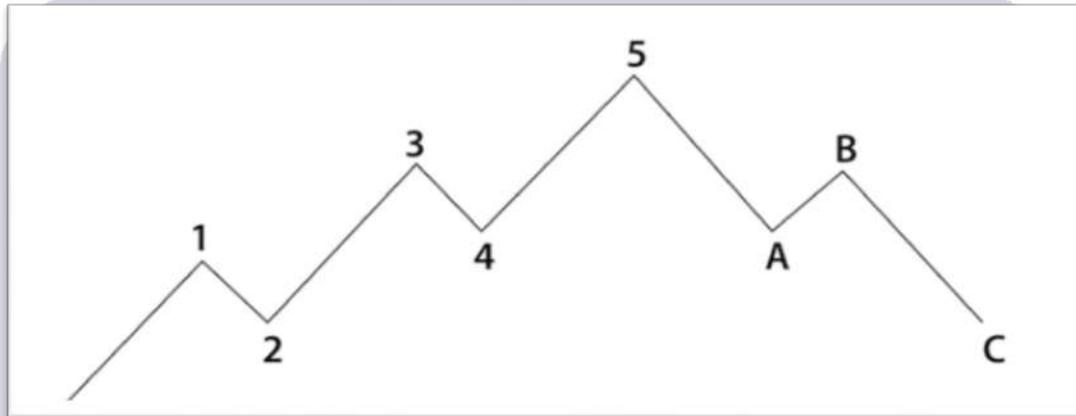


Elliot Wave Theory

The theory, also known as the Five Wave Principle, was discovered by American Ralph Nelson Elliot in the 1930s. The principle is basically based on the fact that investors act with herd psychology within certain behavioral patterns. This movement fluctuates between optimism and pessimism. In the model, price periods in the direction of the trend are called effects, and periods in the opposite direction are called corrections. In Elliot Theory, impacts consist of five waves and corrections consist of three waves. The structure consisting of five



effects and three corrections is called the 5+3 cycle. The first five waves are expressed in numbers as 1, 2, 3, 4, 5, and the following three waves are expressed as A, B, C. According to Elliot, a five-wave movement is never followed by another five-wave movement.





Impact and Correction Waves

Wave 1 : It occurs as a strong rise after a stuck price movement. Wave 1 is generally the shortest of the five waves.

2nd Wave : It usually occurs as profit sales after the 1st wave. Wave 2 cannot undo all of wave 1.

3rd Wave : If the prices exceed the level of the 1st wave due to the increase in transaction volume after the 2nd wave, the 3rd wave occurs. The 3rd wave is the most dynamic movement in the trend direction.

4th Wave : It is the correction movement that occurs after the 3rd wave. The 4th wave cannot undo all of the 3rd wave.

5th Wave : If the bottom of the correction made in the 4th wave is above the peak of the 1st wave, a 5th wave is formed in the form of an upward movement. There is no strong trend here. Price movements were not supported by trading volume.

Wave A : With the end of the 5th wave, the correction movement supported by the transaction volume creates the A wave.

Wave B : The upward effort that occurs in contrast to wave A with weak trading volume creates wave B.

Wave C : It is a strong selling wave supported by transaction volume falling below the bottom of wave A.



FORMATIONS

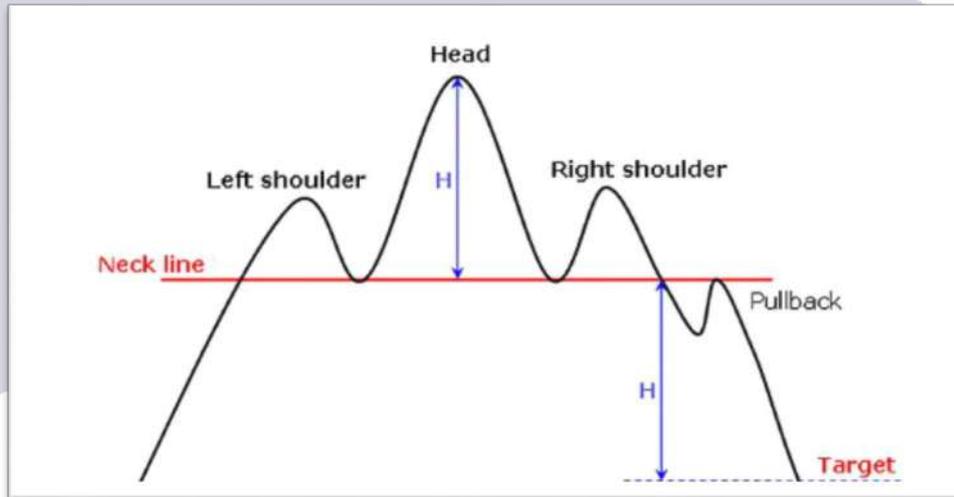
In technical analysis, it is a tool that allows analyzing charts to predict future price movements and to determine reversal or continuity points. They are examined under two main groups: trend reversal and compression formation. Trend reversal formation can be shown as shoulder-head-shoulders, double top and bottom, triple top and bottom, and v formation. Formations such as triangles and flags can be shown as compression formations.

Shoulder-Head-Shoulder Formation

the most well-known and highly reliable formation in technical analysis . It is a formation that appears at the peak of price movements and generally as a reversal at the end of a rising trend. It is widely used because it is easily understood in graphics. The formation of the shoulder-head-shoulder formation can vary between one month and several years. It is called the shoulder-head-shoulder formation because it resembles a person's two shoulders and head. When a rising trend ends, prices begin to fall due to profit taking. This creates the left shoulder of the formation. Prices rise again due to the demand created by investors who consider the price drop as a buying opportunity and reach higher levels than the previous peak. However, after this temporary demand, prices cannot rise any further and stop rising, and with the start of sales again, prices begin to fall rapidly. This decline forms the head of the formation. The dips between the head and shoulders form the neckline. Then, a rise occurs up to the left shoulder levels with a very low trading volume. From here, prices begin to fall rapidly, forming the right shoulder and completing the formation as it breaks the neckline downwards. Prices are expected to fall by the difference between



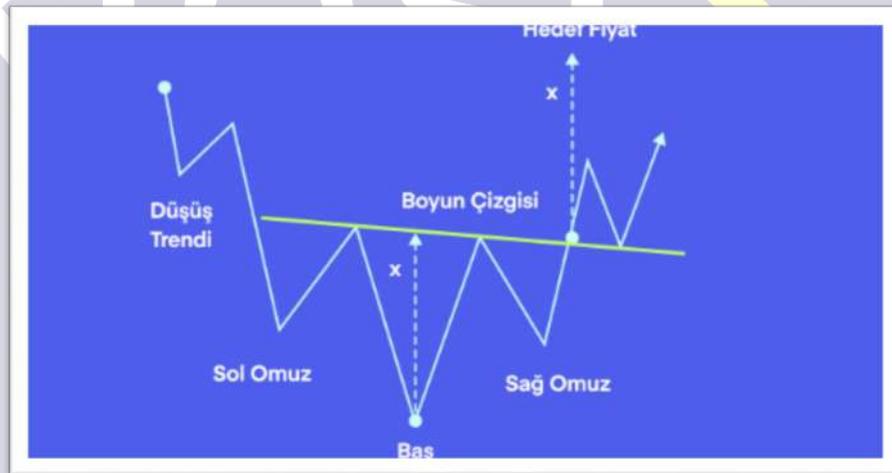
the neckline and the shoulders. Trading volume is one of the most important data of the head-and-shoulders formation. In this formation, the transaction volume in the formation of the left shoulder is always higher than the transaction volume in the formation of the head and right shoulder.





Inverted Shoulder-Head-Shoulders Formation

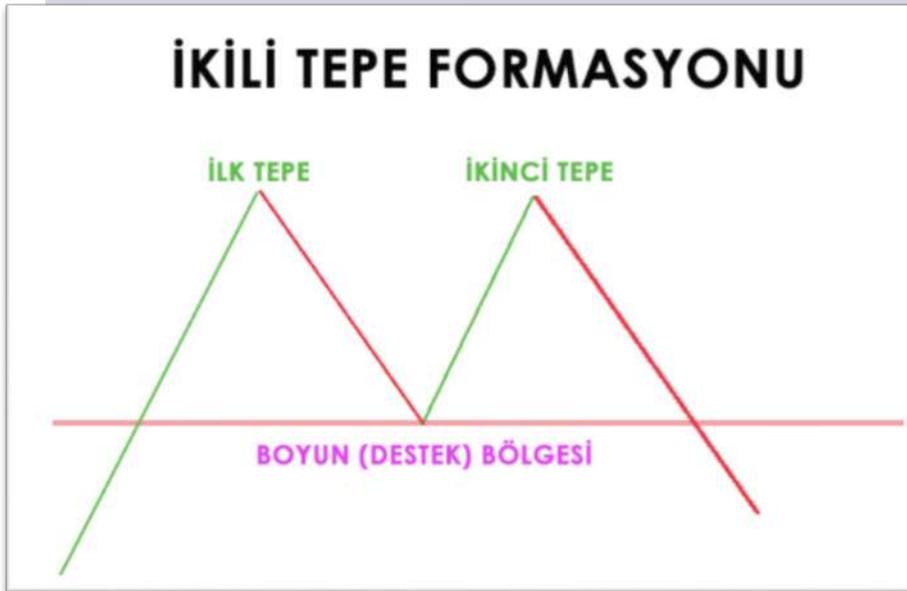
It is called the inverted shoulder-head-shoulder formation because it resembles the two shoulders and head of a person standing upside down. It is the opposite of the shoulder-head-shoulders formation in both form and function. It usually occurs at the end of a downtrend. Unlike the three tops formed in the head-and-shoulders formation, there are three bottoms here. At the end of a downward trend, a left shoulder is formed when investors who think that the bottom market will rise begin to buy, but after this limited rise, prices continue to fall rapidly and a second bottom is formed. The second bottom formed forms the head region of the formation. Prices begin to rise rapidly in line with the purchases coming from these points and form the right shoulder of the formation. The formation is completed when the neckline breaks upward.





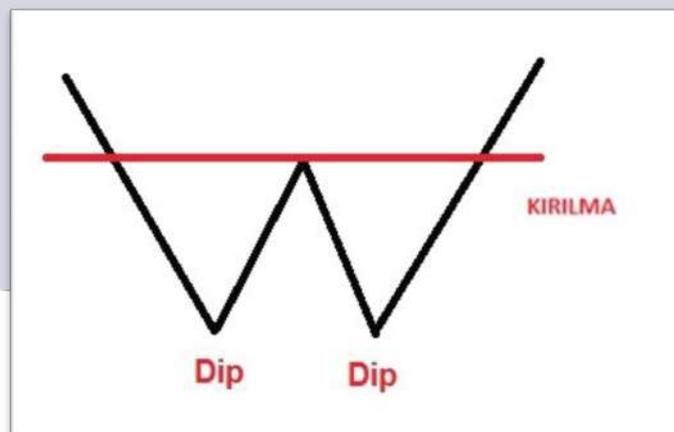
Double Top and Bottom Formation

Double Top Formation : If the prices in an uptrend make a downward movement after reaching the peak, and then the prices that rise again cannot break the previous peak, a double top formation occurs. Completion of the formation and downward trend may mean a sell signal for investors. Since the double top formation resembles the letter M, it is also called M formation in some sources.





Double Bottom Formation : It is a formation that is the opposite of the double top formation in form and function. If the prices in a downward trend make an upward movement after reaching the support point, and if the prices reaching the second bottom level cannot break the support point there with repeated sales, a double bottom formation occurs. The formation creates the perception that the downtrend will end and the uptrend will begin. Completion of the formation may mean a buying signal for investors.





V Formation

These are formations that appear as V or Inverted V when the activity is high . In the V formation, prices fall rapidly downwards and suddenly rise sharply without giving any signals.

In the inverted V formation, prices rise rapidly and suddenly fall sharply.

V formation is a formation that is difficult to predict because it occurs in markets with high volatility and trend reversals occur suddenly and without any signals. It is not a very preferred formation type as it is a formation whose detection is delayed .



Triangle Formation Trends that produce triangle-like shapes as a result of combining the peaks and valleys of a financial instrument within a certain time period are called triangle formations. Triangle formations are examined in three groups;

Symmetrical Triangle Formation

It is a formation that occurs as a result of the top of each upward movement being lower than the previous peak and the bottom of each downward movement being higher than the previous low. In symmetrical triangles, the formation must end in order to determine the direction of the trend. The direction of the trend can be determined by breaking one of the support or resistance lines quickly with high volume.

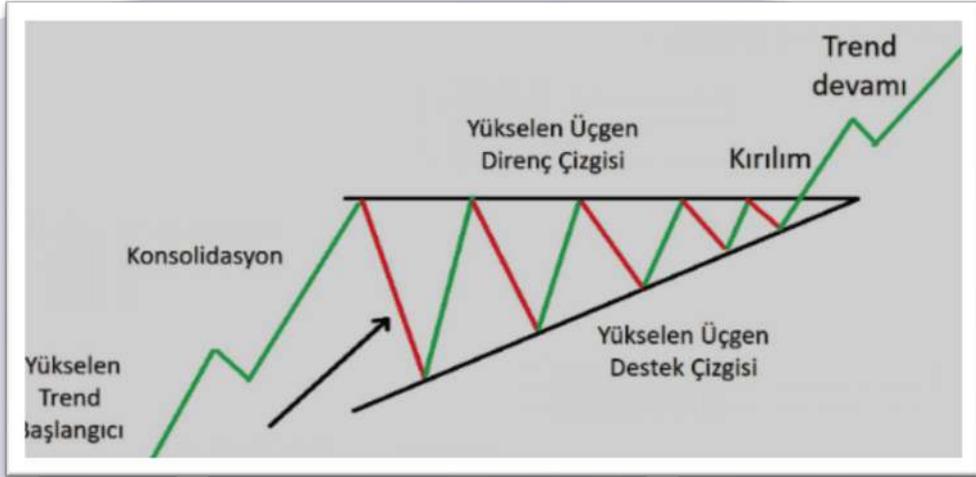


Ascending Triangle Formation

formation where the bottom point of each downward movement is higher than the previous bottom point and the bottom points of each upward movement



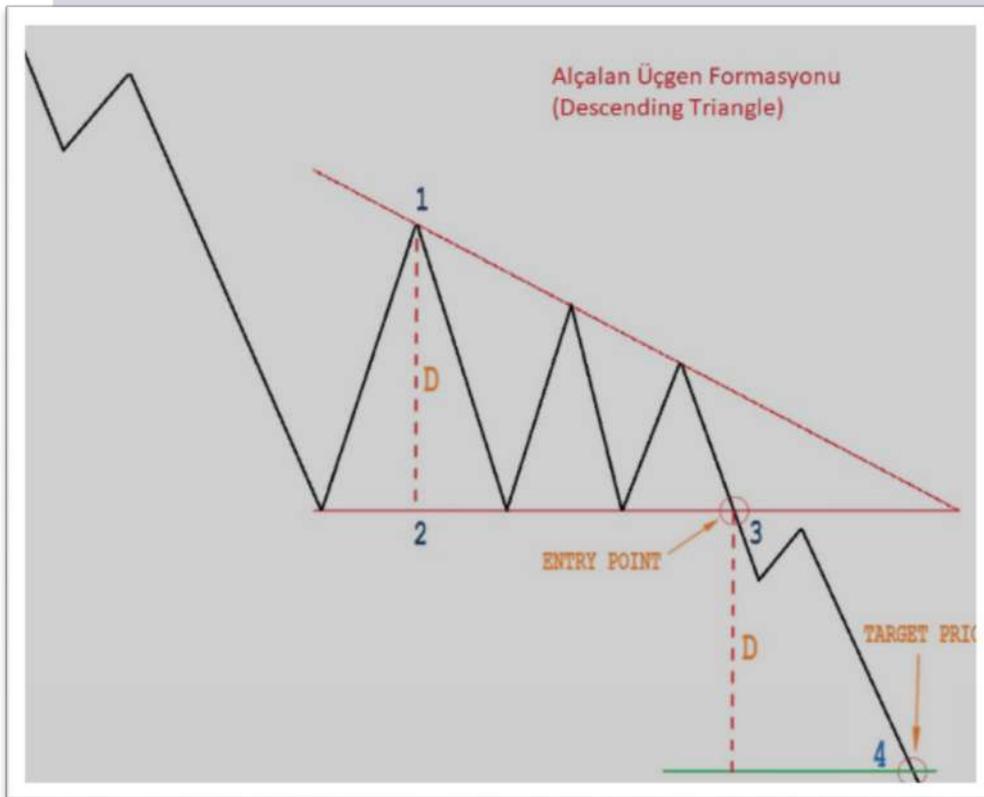
are at a certain level . At the end of the formation, prices are expected to move upwards.





Descending Triangle Formation

formation where the peak of each upward movement occurs lower than the previous peak and the bottom points of each downward movement are at a certain level. At the end of the formation, prices usually break downwards.





Flag and Pennant Formation

quite common formation types. In an uptrend, their formation takes between 5 days and 1-3 weeks, while in a downtrend, this period is 1-2 weeks. The formation of pennant formations is shorter than the flag formations.

They may be slightly downward sloping in a rising market and slightly upward sloping in a falling market.

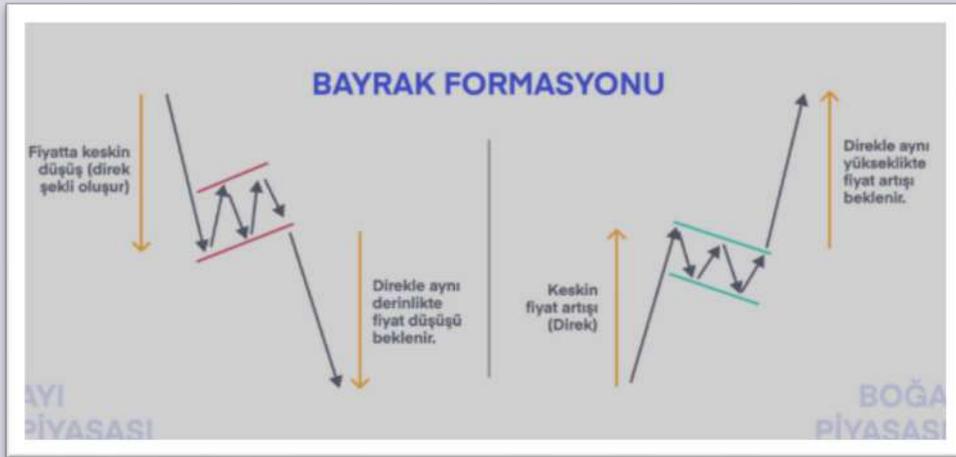
Flag Formation

The flag formation got its name because it resembles a flag in shape. It is a formation that occurs as a result of the market entering a pause after the prices move very quickly and realize a high transaction volume. The distance from the beginning of the rapid movement before the formation occurs to the level where the formation ends is called the flagpole.

In the flag formation seen within the rising trend, prices are expected to rise rapidly as the resistance line is broken with high transaction volume. The falling movement is expected to last as long as the distance of the flag from the pole.



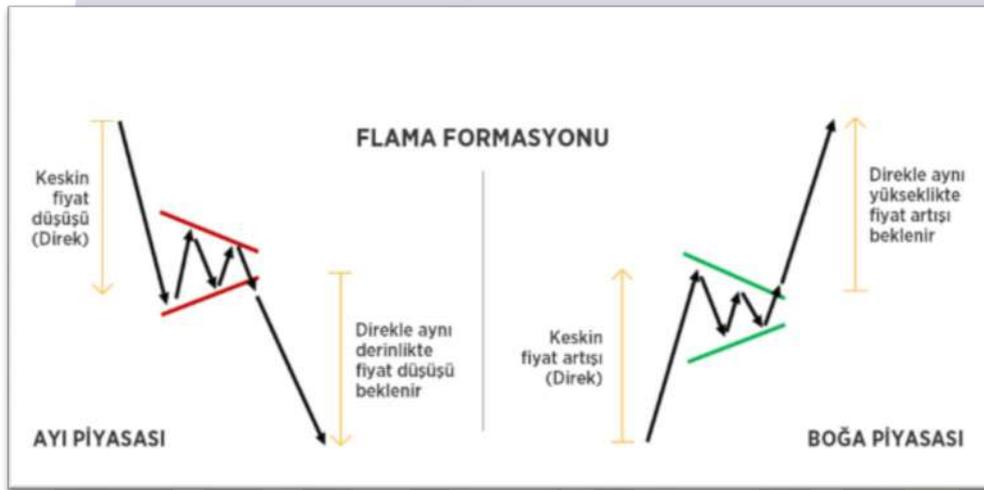
In the flag formation seen in a downtrend, prices are expected to fall sharply as a result of the support level being broken. The downward movement is expected to last as long as the flagpole distance.





Pennant Formation

the pennant formation is structurally very similar to the flag formation, it resembles a pennant in shape and differs from the flag formation.





Cup Handle and Inverted Cup Handle Formation

Cup Kulp Formation

Cup handle or “cup with handle” formation is a continuation pattern in technical analysis. In order to understand that the formation has formed, it is necessary to see that first a bowl is formed on the technical chart, and then a second bowl is formed, approximately 1/3 of the size of this bowl. The two bowls formed peak at almost the same levels.

Since this model resembles a cup and its handle, the formation is called cup handle. The cup handle formation, like other formations, gives investors information about the next movement of the price.

The output of the formation is that with the completion of the cup and handle shapes, the neck line breaks upwards and based on the price at which the handle formation ends, an increase is expected to occur as much as the depth of the cup.

The taller and more “U” shaped cup shape provides a stronger signal as the formation forms. Cup shape with sharp “V” base should be avoided. The cup should not be too deep. As prices fall we should observe a decrease in volume. Volume should remain below average once the bottom of the cup is reached and then increase as the stock begins to move higher, rising again to test the previous high.



Inverted Cup Handle Formation

The inverted cup handle formation is a continuation formation, just like the cup handle formation. It can be stated that the shape is literally the opposite of the cup handle formation.

Just as in the cup handle formation, the rise continues after the neckline is broken upwards, in the reverse cup handle formation, the decline will continue after the neckline is broken downwards.

The low volume in the inverted cup handle formation is very important as it



indicates the corrections following the downward movement and should be taken into consideration as confirmation of the formation.

We can also determine the target price in the inverted cup handle formation with this formation. When determining the target price, the length between the top of the cup pattern, that is, the inverted cup, and the neckline allows us to calculate the decline that will follow after the completion of the formation.



Wedge Formations

formations, which occur when increasingly lower peaks and increasingly lower lows create a compression area, are harbingers of unstable markets.

These formations, which are confused with triangle formations, differ from them in support and



The resistance is inclined towards a certain direction. It usually takes 2-3 weeks for these formations to form.

Rising Wedge Formation

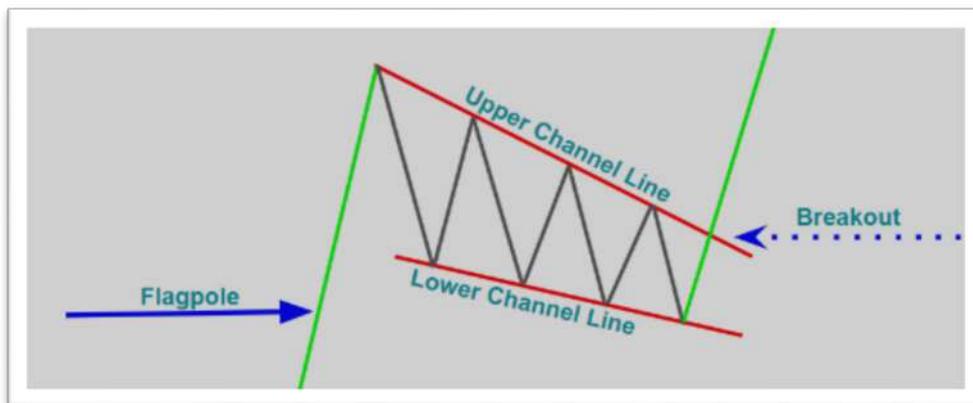
Although prices are increasing, demand is decreasing. They can be seen in falling or rising trends. The support is also steeper than the resistance level. Rising wedge formations generally break downwards. After the break occurs, it is assumed that the formation has completed its formation.





Descending Wedge Formation

Although the support and resistance lines are also downward sloping, the resistances are steeper. Descending wedge formations generally break upward.





MATHEMATICAL METHODS

are trying to obtain information about the market conditions of that instrument by passing the price of a financial instrument through a certain process. Technical indicators produced using price data produce buying and selling signals. Technical analysts interpret these trading signals and place trades, often combining them with fundamental analysis data. Mathematical Methods are divided into two;

- A) oscillators
- B) Indicators



A) OSCILLATORS

Oscillators are indicators that show whether a financial instrument is cheap or expensive. They often produce signals against the market by detecting overbought and oversold points. They provide information about the price and reference clear trading points.

Major Oscillators are:

- momentum
- Relative Strength Index
- Stochastic Oscillator
- MACD (Moving Average Convergence/Deivergence)

MOMENTUM

Momentum is an indicator that measures the rate of change of prices. It shows where today's closing price is compared to the closing price of the previous day for a certain period of time, compared to the compared day. Formula of momentum;

Momentum = (Last day's closing price / x days ago's closing price) * 100

A standard period of 14 days is chosen for momentum. However, the period may vary depending on the financial instrument, maturity or strategy in line with the investor's preferences. Momentum fluctuates around the 100 line. In other words, the 100 line is a reference for the course of prices and for making buying and selling decisions.

When the momentum curve breaks the 100 line upward, it means that prices are in an upward trend and buying can be done. If the upward momentum begins to stagnate or remain stable, this may mean that the upward trend is



losing momentum and a trend reversal will begin.

When the momentum curve breaks the 100 line downwards, it means that prices are in a downward trend and a sale can be made. If the downward momentum begins to stagnate or remain stable, this may mean that the downward trend is losing momentum and a trend reversal will begin.



RELATIVE STRENGTH INDEX (RSI)

RSI, called Relative Strength Index in Turkish, was developed by J. Welles Wilder in 1978. RSI, which takes a value between 0 and 100, reflects the internal strength of a financial instrument by comparing the closing prices of a financial instrument within a specified period compared to the previous day. When using RSI, 9, 14 and 25 day periods are generally preferred.

Below 30 on the RSI curve, oversold; Level 50 is the balance point; Above 70 indicates overbought. In RSI, price reactions occur in a very short time. Therefore, using RSI will yield more successful results in short-term trading transactions. In fact, sometimes the breaks in the RSI chart occur before the



price chart.

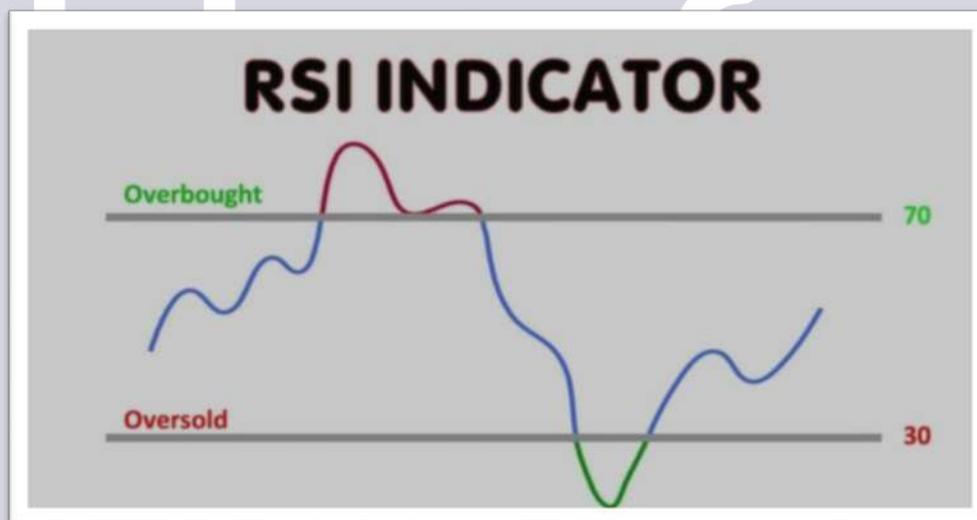
RSI generally moves in the same direction as the price. However, if the RSI does not support the chart, that is, if there is a mismatch between the price and the RSI, we can deduce that there may be a retreat or trend reversal.

In the visual, the 70 level has formed a strong resistance. Above this level, an overbought zone appears.

RSI is calculated as follows:

$$RSI = 100 - \left(\frac{100}{1 + RS} \right)$$

$$RS = \frac{\text{Average rising move}}{\text{Average falling move}}$$





RELATIVE STRENGTH INDEX (RSI) COMPATIBILITIES

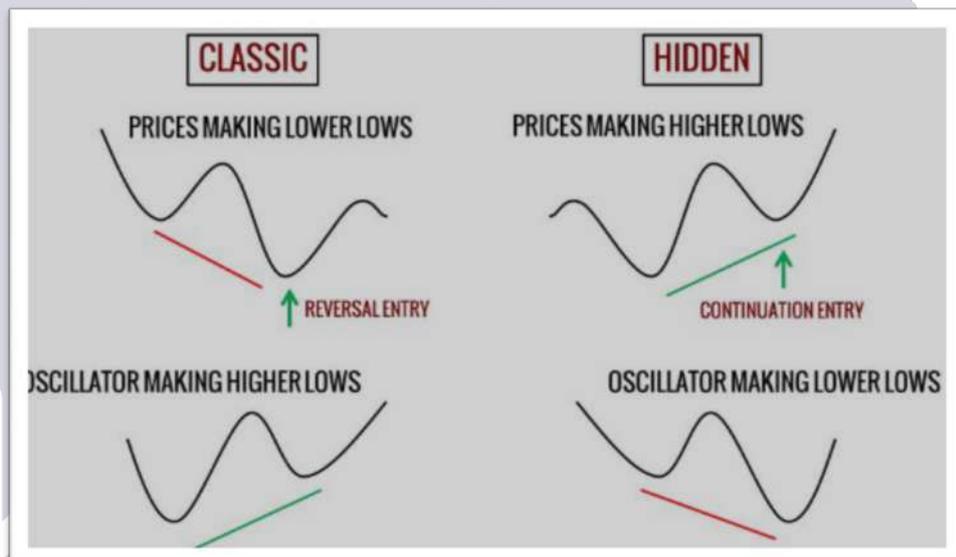
RSI indicator is the situation called RSI divergence. So, what is divergence in RSI and how should it be interpreted? Under normal circumstances, the buy or sell signal that the trend line formed by the calculated RSI values tells us is expected to proceed in parallel with the price chart of the product. However, in some cases, the signal given by the RSI value and the price movement of the financial instrument move in a different direction. This situation is called RSI divergence.

While the RSI indicator is rising, if the price of the financial instrument moves in the opposite direction, that is, falling, this situation is called **positive divergence in RSI**. If the RSI increases while the price continues to decrease, this is interpreted as a strong image of the relevant financial asset in the medium-long term.

Negative divergence is the name given to the situation where prices move in the opposite direction and draw a rising chart during a period when the RSI is declining. Negative divergence in RSI is interpreted as a negative outlook for the relevant financial asset. Because the RSI is falling, which means the buying demand for that instrument is also falling. In this case, the increase in



prices can be interpreted as occurring as a result of a temporary or manipulative factor. The signal produced by the negative divergence situation is that the asset price may enter a downward trend in the medium-long term.



RSI Swing Rejections

Certain price movements, pronounced RSI Swing Rejection or RSI Swing Error, can produce extremely valuable analysis signals for investors. This technique examines the movements of the RSI value into and out of overbought or oversold areas. Oscillation rejection can occur in 2 different ways:

- Bearish rejection
- Bullish rejection



The downswing rejection scenario occurs in 4 stages;

- The RSI value falls below 30, that is, in the oversold zone.
- RSI rises above 30 again.
- The RSI drops again, but this time not to the oversold area.
- In its last move, the RSI rises to exceed its last peak .





The bullish swing rejection scenario occurs in 4 stages;

- The RSI rises to the overbought zone, meaning the RSI value reaches above 70.
- The RSI declines and falls below 70 again.
- There is a rise in the RSI, but this rise cannot push it above 70.
- RSI experiences a big decline and retreats below its last low point

STOCHASTIC OSCILATOR

Developed by George C. Lane, Stochastic is an indicator that evaluates the last closing price of a financial instrument according to its highest and lowest prices in a certain period.

In Stochastic, if the last day's closing price is close to the highest price of the last x days, there is an expectation that the prices will increase; if it is close to the lowest price, there is an expectation that the prices will decrease. A 5-day period is generally used in this indicator. Stochastic, which is an effective indicator in determining overbought and oversold areas, is very sensitive to price changes.

by subtracting the lowest day price in the selected period from the last closing price of the product and dividing this value by the difference of the highest and lowest prices in the same period is displayed as %K. The moving average of %K gives %D. If the %K curve cuts the %D curve upwards, purchase; If it crosses downwards, it is considered a sell signal.

Stochastic takes values between 0 and 100. If the price falls below 20, it indicates that it is in the oversold zone, and when it rises above 80, it indicates that it is in the overbought zone. If the %K curve does not confirm the direction while prices are peaking or bottoming, there may be a mismatch and this mismatch is an indicator that the trend will return.



Stochastic is calculated as follows:

$$K = (CL) / (HL) * 100$$

K: Stochastic

C: Last day closing price

L: Lowest price value in the specified period

H: Highest price value in the specified period



MACD (0)

Developed by Gerald Appel, MACD is a trend- following indicator that measures the relationship between two different moving averages of the closing price, in other words, harmony and divergence. The standard calculation of MACD is to take the difference between the 12-day exponential moving average and the 26-day exponential moving average.

$$MACD = (EMA12) - (EMA26)$$



In the 9-day exponential moving average of the values found, there is a warning line, also known as a signal line, shown as dashed lines. The MACD indicator, which is more convenient to use in medium and long-term charts, gives trading signals by breaking the signal line downwards or upwards. MACD, breaking the signal line upwards, is in the buying direction; If it breaks downwards, it gives a sell signal.

If the MACD does not confirm the price chart, that is, if there is a mismatch, this can be considered an indicator that the trend will return. In addition, MACD moving close to zero level may produce erroneous signals.

The lengthening of the bars in the MACD indicates that the difference between the short and long-term moving averages has increased and indicates that the trend is strong.

The shortening of the bars on the MACD indicates that the rising or falling trend has become horizontal.





DISPUTES

We made an introduction to this topic specifically about RSI. Now let's consider it in general.

Discrepancies, also expressed as differences between indicator and price movements, are important signals. These formations, which we can observe in many indicators, are considered to be relatively more consistent. **Disputes; They are harbingers of trend reversals and offer important opportunities to investors.** The primary work to be done in detecting discrepancies is to conduct a trend study on the price and indicator chart. In normal cases, the movement direction is the same in both windows. Conflicts are when the indicator does not confirm the price movement in the intervals where the price makes new tops or new bottoms, that is, the new tops and bottoms are not a continuation of a trend. Disputes that generate signals in the direction of buying; Positive Dispute, and disagreements arising in the selling direction are called Negative Dispute. The important detail here is to look at the signals created by the bottom levels when buying and the signals created by the top levels when selling. Below is an example of a negative divergence producing a sell signal and a positive divergence producing a buying signal.



Negative Disagreement



Positive Disagreement

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B) INDICATORS

Unlike oscillators, indicators do not provide information about the price of the instrument. Instead, they measure whether there is a trend in the market in one direction. However, the direction of this trend is not clear. Whether there is a trend or not is determined by indicators and transactions can be entered according to the direction of the trend.

Main Indicators are:

- Moving Averages
- Parabolic Wrap
- ADX (Average Directional Movement Index)
- Bollinger Bands
- Ichimoku

MOVING AVERAGES

Moving average is the method used to calculate the average of a series of prices over a specified time period. The word “moving” means that the average is not static but is constantly recalculated based on data acquired over time. These calculations are mainly; It can be done with different methods, including Simple, Exponential, Weighted, Variable, Triangular, Walles Wilder methods.

The most popular usages are BUY if the price crosses the average upwards and SELL if it crosses downwards. Likewise, when two different term averages are used, when the short-term average crosses the long-term average upwards, it is considered as a BUY SIGNAL, and when it crosses downwards, it is considered as a SELL SIGNAL.



Golden Cross

The upward intersection of the short-term moving average (e.g. 50-day) with the long-term moving average (e.g. 200-day) is called the "golden cross".

The Golden Cross is interpreted as a long-term bull market awaiting us, where prices rise with great momentum and past peaks on the charts can be exceeded. As a time setting, checking this intersection on the Daily Chart gives a better idea.

Death Cross

When the short-term moving average (for example, 50 days) crosses the long-term moving average (for example, 200 days) downwards, it is called a "death cross".

The occurrence of the Death Cross is interpreted as a long-term bear market



in which prices enter a falling trend and the bottom points on the charts may fall even further. Just like the Golden Cross, checking this intersection on the Daily Chart as a time setting gives a better idea.



PARABOLIC SAR

Parabolic SAR is an indicator used to determine the change points of trends and the entry and exit points of the position. The word SAR consists of the initials of the words "Stop And Reversal". Therefore, using it in trending markets gives more consistent results.

The Parabolic SAR indicator is interpreted with the help of points above or below the prices. The indicator gives a buy signal if the prices fall below when the dots are above the prices, while it gives a sell signal if the prices rise above when the dots are below the prices. Since the Parabolic SAR indicator does not

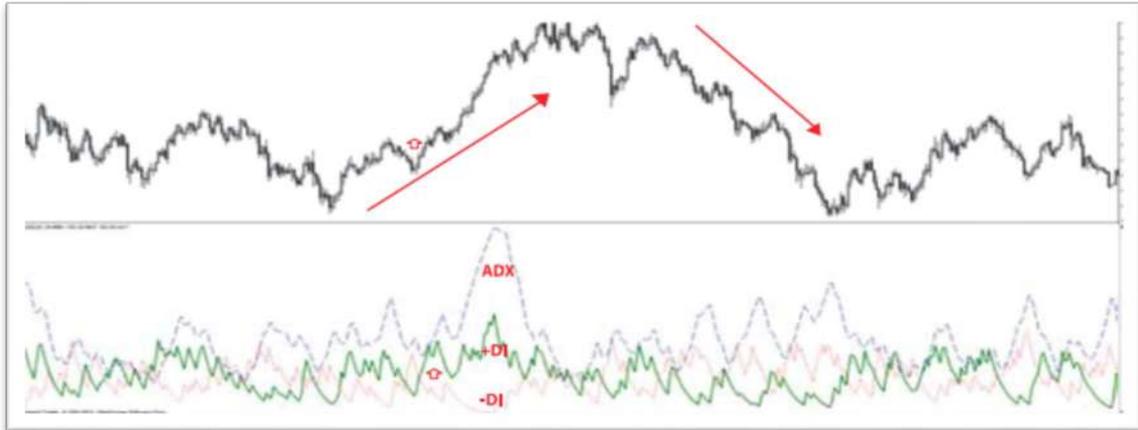


give very useful results in non-trend periods, it would be more appropriate to use it together with other indicators.



ADX (Average Directional Movement Index)

ADX indicator is an indicator that interprets whether there is a trend in the market by detecting the positive and negative standard deviations of the instrument and finding the difference between them. If the difference between standard deviations is more than 30, it is interpreted that there is a trend in the market. If it is below 30, the market is considered horizontal and trading with oscillators is recommended. This indicator indicates that the more transactions a price movement takes place, the more reliable it is.



BOLLINGER BANDS

Bollinger Bands is a technical analysis method developed by famous economist John Bollinger in 1980. Bollinger bands are an indicator based on a simple moving average. It is the indicator obtained by adding and subtracting the standard deviation value of the moving averages in the lower and upper directions. The formula for Bollinger Bands is as follows:

The most commonly used moving averages are:

- Middle Bollinger Line: 20-Day Moving Average
- Lower Bollinger Line: Middle Bollinger Line - 2 Standard Deviations
- Upper Bollinger Line: Middle Bollinger Line + 2 Standard Deviations

The status of the upper and lower bands in Bollinger bands can give various signals. The slowdown in the upward movement in the upper band indicates that prices cannot go further upwards and sales may occur. In the opposite



case, that is, if the downward movement slows down in the lower band, it shows that the prices cannot fall further and the market may be buying.

While the narrowing of the Bollinger bands signals that the market will change direction, the overflow of the lower and upper bands may indicate that the market will move in the direction.



ICHIMOKU

Ichimoku, which means "a look" in Japanese, was developed by journalist Hosoda Goichi. Ichimoku, which includes indicators such as moving average, MACD, and momentum, generally provides more consistent results on long-term charts.



The Ichimoku indicator consists of five lines.

Tenkan Sen (Red): Represents the 9-day moving average.

Kijun Sen (Blue): Represents the 26-day moving average.

Senkou Span A (Orange): The moving average of Kijun Sen and Tenkan Sen is taken and shifted by 26 days.

Senkou Span B (Purple): The 52-day moving average is taken and shifted by 26 days.

Chi Kou Span (Green): The closing price is shifted by 26 days.

If Tenkan Sen crosses Kijun Sen up, get used to it; If it crosses down, it gives a sell signal. If Kijun Sen prices are above, it is a bear market; if it is below, it is a bull market.

The region between Senkou Span A and Senkou Span B is called the Ichimoku Cloud (Kumo).

If prices are above the cloud, it is an uptrend; Below it, there is a downward trend, and inside the cloud, there is a horizontal trend. The orange color of the cloud represents the bull market, and the purple color represents the bear market. The thickness of the cloud is directly proportional to the strength of the support and resistance levels.

If the Chi Kou Span price crosses up, it is considered a buy signal, and if it crosses down, it is considered a sell signal.



WHAT IS COPY TRADE?

CopyTrade; Basically, it is the name given to the situation where less experienced investors trade by copying the transactions of more experienced and successful investors.

can make a profit by copying the strategies of a successful investor .

The points that an investor who wants to do copy trading should pay attention to are as follows:

Reliability

The copy trader should take a look at the past performance and strategies of the investor he is copying. It may not always be a good strategy to copy the investor with the highest returns; What matters is a consistent and sustainable success rate.

Risk Tolerance

Every investor's risk tolerance is different. The person making a copy trade



should pay attention to the risk profile of the investor he will copy and decide whether it is suitable for him or not.

Costs

On some platforms, extra fees may be charged for the copy trading service. Whichever platform the investor uses, he/she should check these costs in advance.

Automatic and Manual Options

Some Copy Trade platforms automatically copy trades, while others require manual confirmation. Investors should pay attention to this issue to choose the approach they want.

Diversity

Rather than tying all of his investment to one person's strategies, an investor can diversify his portfolio by copying the strategies of different investors .

What are the advantages of Copy Trade?

Copy Trade offers investors the opportunity to learn and apply the strategies of experienced investors by directly copying them, and also saves time by eliminating the need to constantly follow the markets.

We can list the advantages of Copy Trade as follows;



Learning Opportunity

For beginner traders, Copy Trade offers the opportunity to observe and analyze the trading strategies of experienced traders. In this way, it is possible to gain in-depth knowledge and experience about the markets.

Time Saving Tip

Instead of wasting time on individual analysis and research, traders can directly copy successful trading strategies. This is a great advantage, especially for investors who cannot constantly follow the markets.

Allocation of Risk

Rather than committing to an additional strategy or approach, it is possible to spread the risk by copying the strategies of different investors. This diversity can help minimize potential losses.

Less Emotional Decision

Investors can often make emotional decisions, especially during market fluctuations. However, Copy Trade helps reduce emotional decision-making by offering an objective approach.

Ease of Access

For new investors, the process of analyzing the market and adopting the right strategies can be complicated. Copy Trade streamlines this process, giving traders quick access to the successful strategies of others.



Is Copy Trade Reliable?

The reliability of Copy Trade depends on the platform used, the investor chosen and the level of transparency the platform offers. Careful research and selection is recommended when copy trading as not every platform or investor is equally reliable.

Reliability of the Platform

The history, license and customer comments of the platform on which copy trading will take place provide important information about the reliability of the platform. Platforms that are licensed by regulatory authorities and have a good reputation are generally considered more reliable .

Background of the Investor You Selected

The past performance and trading strategies of the trader you want to copy give clues about the reliability of this trader. However, it is important to remember that past performance does not guarantee future results.

Transparency

A reliable Copy Trading platform transparently presents all transaction details, potential risks and performance of the copied trader. This information helps the investor make informed decisions .

Risk Management Tools

Some platforms offer tools that help you limit your risk when copy trading. These tools are very useful for minimizing potential harm.



What are Copy Trade Methods?

- **Social Trading Platforms**

ZuluTrade, eToro , CopyOp and Ayondo allow traders to follow and automatically copy other users' trading strategies.

- **Copy Trading Brokers**

Some online brokers offer investors the opportunity to copy the portfolios of other successful investors. These brokers usually provide this service using their own platforms.

- **Meta Trader 4 and Meta Trader 5**

Meta Trader platforms include a feature that allows traders to copy other traders' trades. This feature can be found under the name “Trading Signals”.

- **Algorithmic Trade**

-

Traders can trade using successful algorithmic trading strategies and offer these strategies to other traders.

- **Signal Providers**



Some financial analysts and traders may assist other investors by providing trading signals. These signals can be followed manually or copied automatically.

PAMM/MAM ACCOUNT TYPES

Since the number of people interested in the financial market is increasing day by day, Forex has become places where both novices and professional traders have the opportunity to earn additional passive income and even find a new full-time job. This seems possible due to new trading approaches that have emerged in recent years.

One of the most popular and progressive approaches is the PAMM account. PAMM stands for Percentage Allocation Management Module.

MAM stands for Multi Account Manager. This solution is mainly designed for fund and money managers.

It allows multiple clients to manage their transactions for a certain percentage of successfully executed transactions.

This particular solution makes it easy for investors or money managers to execute multiple transactions for multiple groups of clients at the same time.

Therefore, it is much easier to manage risk from a single account.

In general, copy trading allows individual traders and investors involved in the financial markets to automatically and repeatedly copy trading positions opened and managed by other licensed professionals.



The copying transaction attaches a piece of the copying processor's capital to the copying processor's account. However, any trading decisions made by the copied trading manager will appear in the member's account. These actions include opening a position, setting Stop Loss and Take Profit orders, and closing a position.

These activities are carried out within the replicated investor's account simultaneously between the replicated investor's account and the replicated investor's distributed trading funds.

PAMM Trading Solution

PAMM is the name of the special option that allows trading managers to trade funds collected from various sources labeled as sub-accounts.

A particular money manager with loads of trading experience and suitable background will promote their services on certain websites. A resume always includes performance history, background, possibly a qualification, terms of a particular account, and more. It also specifies the commission that will be applied on the winning trade.

The money manager is responsible for the funds of investors who trust him and risk their money, which means that there is an additional incentive for the manager to trade responsibly and bring the best possible result.



Benefits of PAMM Accounts

- First of all, as you know, the best PAMM accounts allow their traders to make profits from trades, regardless of their trading experience, without monitoring the markets, analyzing and wasting their time and energy.
- Trading can be carried out efficiently in a single system without complex accounting when using funds from different sources.
- The money manager is usually experienced in trading, which increases the likelihood of a profitable return.
- The account manager has to deposit their own funds into the account and only receives a commission when the transaction is profitable, providing an incentive to perform their best.
- Investors can choose from a wide variety of money managers and distribute funds across multiple money managers to diversify their portfolios .
- The broker acts as a guarantor, preventing the money manager from withdrawing funds and providing statistics and performance history of different PAMM accounts.
- The investor can start investing in the PAMM account with a certain amount of capital. While the trading leader takes care of the investor's account, clients can study and analyze various aspects of trading in the



financial markets to improve in trading and on a personal level.

- The last but important factor is the security of the platform. With a top and reliable provider, the transaction manager is not allowed to manipulate the client's funds.

Potential risks of PAMM Accounts

- *No matter what financial market managers trade, it is impossible to avoid losses in trading. Therefore, please keep in mind that opening a PAMM account also has some disadvantages as it is quite a risky business.*
- *The second possible disadvantage is that there is often not enough information to control a money manager's trading strategy in detail.*

MAM Trading System

Multiple Account Manager (MAM) trading system allows experienced traders to handle and manage a certain number of trading accounts held by various individuals.

Each trade executed by the account manager is replicated in what is called a "fund pool," and characteristics such as trade size vary depending on the preferences or risk level set by a trade manager.

These accounts essentially allow clients to place their capital in the hands of professional investors who will trade on their behalf. Since this is part of a manager's job, investors automatically pay a special commission for a return.

Multiple leading online brokers offer MAM systems, and each provides unique rules and features.



Advantages of MAM Accounts

- MAM investments are transparent. Each client sees everything in detail on the trading platform, where a client can customize his profile according to his needs and wishes.
- Several platforms offer more than one range of account types. Typically, providers offer different options depending on the client's trading experience, expectations and the level of capital they want to invest.
- Additionally, there are no restrictions on the number of trading accounts and deposit amounts.
- Client sections have the option to start from a minimum of 0.01 lot per transaction . This means that this solution is accessible for novice investors with less capital to start investing.

Cons of MAM Accounts

- Research should be done when choosing a MAM system provider. First of all, sometimes it can be difficult to interpret MAM master's recordings in the absence of modern high-end tools. However, this can be avoided by choosing high-end platforms that are overkill.
- of lots to split, mainly when there is a large split in the balance of client contributions or value estimate , sometimes leading to unbalanced



trading shares for more important accounts.

- Some clients may abuse MAM traders' strategies by essentially copying these trades to their separate accounts or even sharing them with a different person.

WHAT IS AUTOCHARTIST?

Autochartist;

It is one of the world's leading analysis tools with the ability to automatically detect chart formations and Fibonacci patterns.

Autochartist technology constantly scans financial instruments 24 hours a day and alerts the user to transaction opportunities.

Technical analysis formations offered by Autochartist are obtained as a result of algorithms run using historical data of the financial instrument of interest and do not contain personal opinions.

financial instrument is not a determinant of its future performance.



HOW TO USE AUTOCHARTIST?

1. SECTION

ENTRANCE

Autochartist offers easy-to-understand and powerful market research tools that highlight the best trading opportunities to help traders decide what and when to trade, with examples including:

- Chart pattern formations such as Triangle, Wedge, Head and Shoulders and Channel;
- Fibonacci Retracement and Resume, ABCD-, Gartley- and Butterfly patterns; And
- Key Levels (technical analysis of horizontal support and resistance levels)

All of the above are automatically defined by this advanced trading tool and distributed to you in real time through a web interface.

The developed patterns immediately provide traders with information about the areas where trading opportunities are improved (in other words, the points where the price approaches support or resistance levels).

The chart patterns developed are often useful for swing traders who are looking for ranges in which to trade.

In addition to providing trading opportunities, Key Levels provide strong confirmation signals that will support or refute other signals. Although there are no “Developed” Base Levels, they are presented in two forms: Breakout and approaches.

We also offer the Power Stats feature, which provides traders with important statistical information about the instruments they trade on. This



feature helps determine stop-loss and take-profit levels, providing a better assessment of risk and volatility .

All Autochartist features are now available directly to your MT5 app via a dedicated plugin that seamlessly connects to the Autochartist service

Our proprietary technology enables us to automatically monitor thousands of financial instruments 24 hours a day, providing trading opportunities.

Thanks to pattern recognition engines that constantly scan financial markets such as Forex, Index, Commodity, Stock, CFD and Futures, traders are informed about pattern formations in a very short time. Autochartist offers traders many useful features, including:

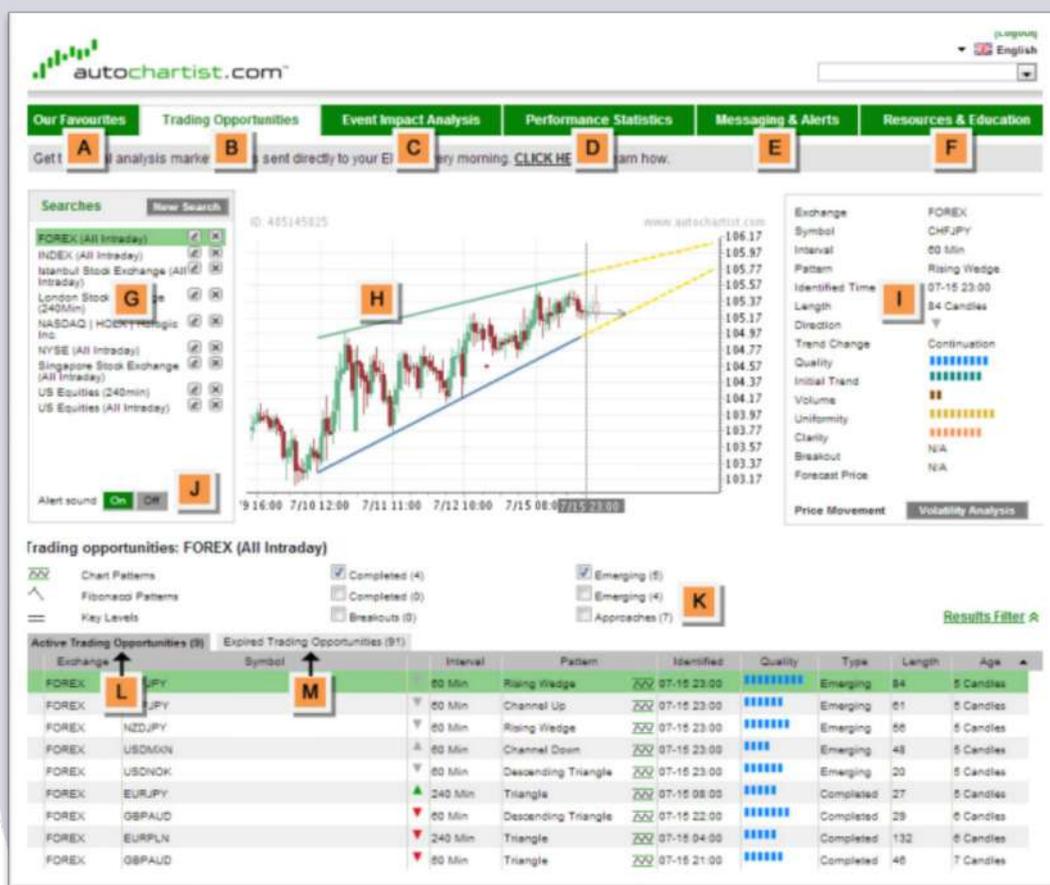
- Providing the opportunity to make more than 1,000 transactions every month in financial markets such as Forex, Index, Commodity, Stocks, CFDs and Futures.
- Chart patterns, Fibonacci patterns and Key Levels are identified in real time when markets are open.
- Traders gain great time-saving opportunities thanks to Autochartist's ability to constantly scan the market for current, high-quality trading opportunities.
- Visual quality indicators enable beginner traders to improve their ability to interpret patterns, while allowing more experienced traders to implement advanced search functions.
- Sufficient research and educational materials are available on the Autochartist website and web interface. Users can share articles, videos, eBooks, webinars, etc. You can access many things like.



2. SECTION

AUTOCHARTIST INTERFACE

When you access Autochartist for the first time, the information loaded by default will be shown in the interface.



- A) Our favorites
- B) Analysis Toolbar
- C) Incident Impact Analysis



- D) Transaction Statistics Tab
- E) Messaging & Alerts Tab (Market Reports)
- F) Resources and Education
- G) Search Pane
- H) Pattern Screen
- i) Price Movement Pane
- J) Volume Button
- K) Results Filter
- L) Results Pane (for Active Trading Opportunities)
- M) Results Pane (for Expired Trading Opportunities)

Our favorites

Based on past performance, “Our Favorites” is a list of currently active investment opportunities with the highest likelihood of success. Each Autochartist opportunity is evaluated by its historical performance based on the chart template type, instrument, and time of day it is defined.

Analysis Toolbar

Click the tabs of this toolbar when you want to switch to the home view (which contains all search results for chart patterns, Fibonacci patterns, and Key Levels), the chart and Fibonacci pattern views, the Key Levels view, and the Trader Group view.

When new patterns or Key Levels are found, this icon 🟡 appears next to the



Based on past performance, the following is a list of currently active trading opportunities with the highest probability of success. Every Autochartist opportunity is evaluated against past performance with respect to the pattern type, the instrument and the time of day it was identified. **Past performance may not be indicative of future performance.**

Limit number of results to: Set minimum % probability:

Groups	FOREX EURCHF 240 min Resistance	FOREX AUDHKD 50 min Channel Down
AMEX (All Intraday) (2)	Identified at: 04-09 00:00 www.autochartist.com	Identified at: 04-09 04:00 www.autochartist.com
Australian Stock Exchange (All Intraday) (10)	Forecast: 1.21929 Probability: 72%	Forecast: 8.12603 Probability: 73%
CBOT (All Intraday) (3)	Pattern: 72% 4418/6134 Symbol: 66% 187/285 Time of Day: 72% 381/531	Pattern: 71% 731/1094 Symbol: 69% 243/356 Time of Day: 73% 445/609
CME (All Intraday) (1)		
CME Forex (1)		
COMEX (All Intraday) (8)		
Commodities (All Intraday) (5)		
Energie - Futures (All Intraday) (1)		
Forex (All Intraday) (8)		
Frankfurt Stock Exchange (All Intraday) (2)		
Grains - Futures (All Intraday) (undefined)		
Indices (All Intraday) (8)		
Indonesia Stock Exchange (All Intraday) (8)		
Johannesburg Stock Exchange (All Intraday) (1)		
London Stock Exchange (All Intraday) (5)		
MCEX (All Intraday) (8)		

Currency Pair: Time Interval:

Group Name: Analysis Type:

Identified at: 03-15 12:00
www.autochartist.com

Forecast: 126.15050
Probability: 74%

Pattern: 74% 3489/4729
Symbol: 75% 144/192
Time of Day: 77% 368/481

Date & Time Identified: 15/3 12:00

Autochartist Performance Stats Relative to this trading opportunity

Out of **4729 EURJPY Resistance Trading Opportunities**
3489 were successful in reaching the forecast zone = **74%**

Out of **192 EURJPY Resistance Trading Opportunities**
144 were successful in reaching the forecast zone = **75%**

Out of **481 EURJPY Resistance Trading Opportunities**
identified at this time **368** were successful in reaching the forecast zone = **77%**

search name and also the type of analysis (chart and/or Fibonacci patterns) on the toolbar. Click the icon and you will be redirected to the relevant search results.



Alerts are automatically cleared from this pane when automatic updates occur. Click on the selected search in the Search Pane when you want to refresh it for new results.

Incident Impact Analysis

This tool gives you a visual summary of the current impact of previously occurring economic events on specific currency pairs. Select the country and news from the menu on the left and its impact on the selected currency will be displayed on the right.

Event Impact Analysis™

This tool gives you a concise visual account of the actual impact previous economic events have had on particular currency pairs. Select the country and news event from the menu on the left, and the effect it had on the selected currency will display on the right.

Select a Country

- Australia
- Canada
- European Monetary Union
- France
- Germany
- Great Britain
- Italy
- Japan
- New Zealand
- Switzerland
- United States

Select an Event in United States

- Consumer Price Index
- Durable Goods Orders
- Employment Situation
- Existing Home Sales
- FOMC Meeting Announcement
- GDP
- Housing Starts
- ISM Mfg Index
- International Trade
- Jobless Claims
- New Home Sales
- Personal Income and Outlays
- Philadelphia Fed Survey
- Producer Price Index
- Retail Sales

Select an Instrument

FOREX

- AUDUSD
- EURUSD
- GBPUSD
- NZDUSD

The table below summarizes the effect that Consumer Price Index event in United States had on the EURUSD after 4 hours.

Summary of effect of Consumer Price Index on EURUSD after 4 hours.

Event Date	Delta	4 hours trend
March 15, 2013	▲	▼
February 21, 2013	▼	▲
January 16, 2013	-	▲
December 14, 2012	▼	▲
November 15, 2012	-	▲
October 16, 2012	▲	▼
September 14, 2012	-	▲
August 15, 2012	▼	▲
July 17, 2012	-	▼
June 14, 2012	▼	▲
May 15, 2012	-	▼
April 13, 2012	-	▼

Summary

	▲	▼
Delta	0 / 2	2 / 2
	4 / 4	0 / 4
	3 / 6	3 / 6

4 hours trend

	▲	▼
Delta	0 / 2	2 / 2
	4 / 4	0 / 4
	3 / 6	3 / 6

The images below represent the price graph of EURUSD around the time of the latest 12 Consumer Price Index news events in United States.

Effect of Consumer Price Index on EURUSD View: 8 hours of 5min data

Date: March 15, 2013

Expected: 0.5

Actual: 0.7

Delta: 0.20 ▲

Trend: ▼

www.autochartist.com

[/klasfx](https://www.klasfx.com)

www.klasfx.com



Transaction Statistics Tab

In this tab, users have direct access to detailed statistics on the overall accuracy of Autochartist for the past 6 months, as well as specific statistics on how Autochartist performs on specific symbols, time granularity, patterns, and trends.

Messaging & Alerts Tab (Market Reports)

Market Reports show a technical view of the markets for the next 24-48 hours and are produced three times a day for markets such as Forex and Commodities, and once a day for exchanges such as the Tokyo Stock Exchange, London Stock Exchange and New York Stock Exchange .

To subscribe, log in to the Autochartist platform, click on 'Alerts and Messaging', enter your email address, select the market you want to trade, choose your language and indicate when you would like the report to be sent to you. Note: To ensure you receive Market Reports, please add alerts@autochartist.com to your address book or contact list.

Resources and Training

This section provides access to training and product support documentation, as well as download and installation instructions for Autochartist's MT4 plugin .



Search Pane

The search pane contains a list of your defined searches. This list contains the default searches when you first log in.

Each search includes criteria you define and specifies:

- Which symbols to be included in the search by choosing between predefined groups such as stock markets or vehicle types or individual groups.
- The Advanced Search option offers special criteria that can be selected to filter and improve search results .

The information appearing in the Results Panes is only information related to the highlighted search (the search name is marked in green).

An existing search can be edited when you click the pencil icon (); When you click the 'close' icon (), the search can be deleted.

(For detailed information on creating or editing a search, see Chapter 3, "Creating and Editing a Search")

Pattern Screen

The price chart, Base Level, and example figure that appear in this pane show the result selected in the Results Pane.



klasf

You can see the following information in the Pattern Screen area;

The date and time when the pattern was defined are highlighted in a gray box (30/12 12:30). Completed patterns appear with a horizontal line showing the prediction level.

The color of the line indicates the forecast direction of the pattern (**green** = up and **red** = down) and is indicated by a directional arrow from the break out point to the forecast line.

The columns to the right of the price chart contain other information about the pattern, such as direction, pattern type, defined duration, quality (miscellaneous indicators) and estimated price (completed patterns). See 'Results Pane E' for detailed information.



Price Movement Pane: View Analysis (PowerStats)

The Power Stats toolset provides traders with the opportunity to predict the relative movement of all instruments. This process is very useful when you create new trading plans or adjust and re-evaluate existing strategies.

Power Stats, a key feature of Autochartist, allows traders to set stop-loss and take-profit levels and also allows identifying risk and selecting the right instruments to trade.

Click the 'View Analysis' button to access the Power Stats feature.



A new screen appears with 3 tabs:

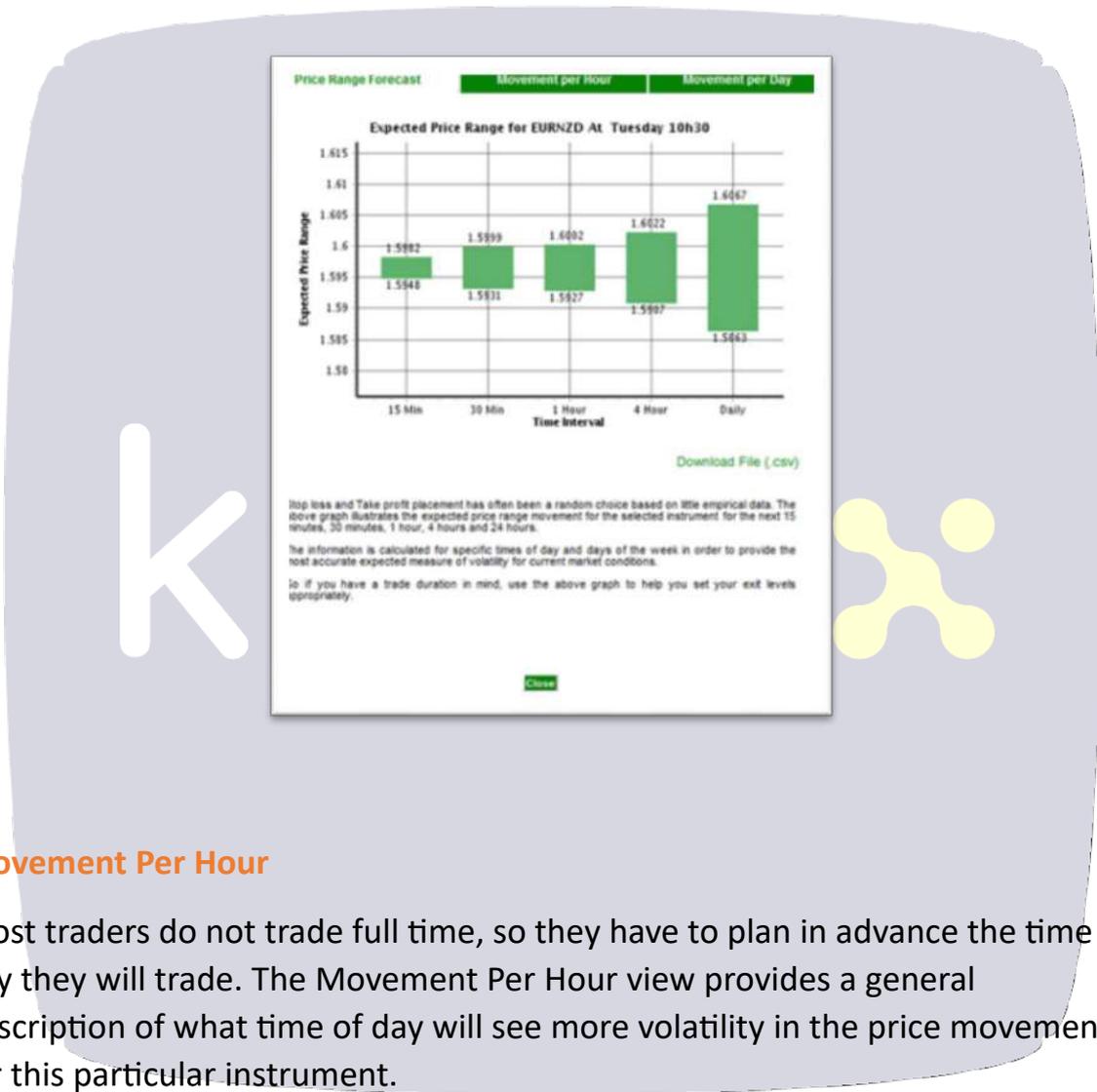
Price Range Forecast

The Price Range Forecast tab is used to see the possible ranges in which the price may fluctuate in different periods/ranges.

This process allows traders to set realistic take profit and stop loss levels based on the last six months of historical information specifically relevant to this instrument on a particular day of the week.



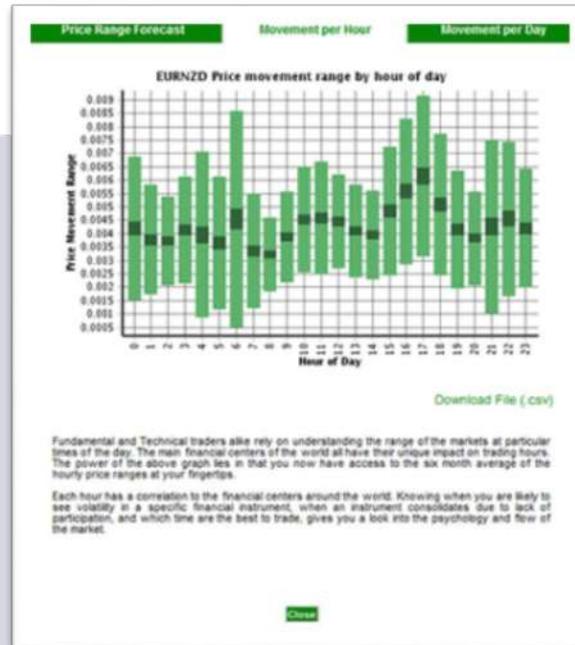
For more advanced users, these ranges are calculated as a single standard deviation level in either direction, giving the price a 68% chance of staying within the range until the end of the specified range.



Movement Per Hour

Most traders do not trade full time, so they have to plan in advance the time of day they will trade. The Movement Per Hour view provides a general description of what time of day will see more volatility in the price movement for this particular instrument.

Traders can decide whether to trade at more volatile times of the day, as the risk may increase even though there is more return, or because price movements are relatively lower in less volatile times .

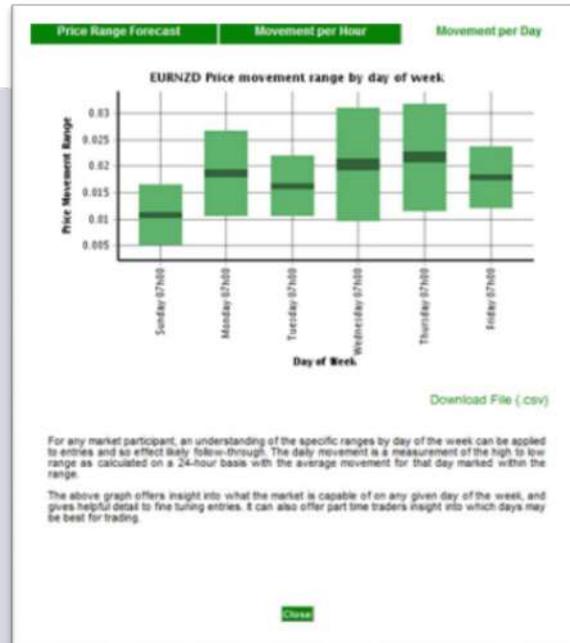


Daily Movement View

Just like the Hourly Movement view, it shows the weekdays when the most volatility can be expected. The purpose of this view is to show traders that certain structural elements of some markets make transactions riskier on certain days.



Volume Button



When new results are identified in any search, the user is given a voice notification saying “blip-blip”. This voice notification is especially useful for being able to continue other tasks while waiting for new processing possibilities to be identified.

Users can change the alert sound on or off:





The component that Autochartist uses to play audio notifications automatically selects HTML5 audio, native browser audio, and Flash player (if available) to play audio. The most used player is Flash. So for your browser: You can update your Flash at <http://get.adobe.com/flashplayer/> . You should also make sure that the sound and application are turned on on your computer.

Results Filter



If the filter does not appear between the Pattern Screen and Results Filter, click its link. The Results Filter is a convenient way to choose the types of trading opportunities you will be interested in.

For example: if you do not want to view the developed Fibonacci patterns, make sure that the corresponding checkbox is unchecked. When these checkboxes are checked or unchecked, results appear or disappear in real time in the Results Pane.



Results Pane: ACTIVE Trade Opportunities

The Active Trading Opportunities tab is always selected when you log in. The Continuous Results Filter contains the most recent search results that fall into the selected categories and are highlighted in the Search Pane.

Active Trading Opportunities are patterns that can still be traded. This means that the price has not moved away from the expected direction and target and the pattern has not yet completed or reached its target. If either of these changes, the result moves to the 'Expired Trading Opportunities' tab (see below)

In case this tab is not visible, immediately click on this tab and the tab title will appear highlighted in dark grey.

Exchange	Symbol	Interval	Pattern	Identified	Quality	Type	Length	Age
FOREX	GBPEUR	240 Min	Channel Down	01-31 07:00	██████████	Emerging	67	0 Candles
FOREX	AUDNZD	15 Min	Support	01-31 01:30	██████	Approach	150	0 Candles
FOREX	USDHKD	15 Min	Support	01-31 04:00	██████	Approach	131	0 Candles
FOREX	USDHKD	30 Min	Support	01-31 04:30	████	Approach	66	0 Candles

The first result is selected and highlighted in green by default.

For clarity and ease of use, when you hover over the results with the mouse cursor, the results are highlighted in yellow. Once you click, the selected result appears in the Pattern Display area and the result is highlighted in green.

The Results Pane regarding Active Trading Opportunities contains the following information:

- Stock Exchange,
- Symbol (Symbol),



- Direction of the pattern,
- Time interval of the bar chart (interval),
- Pattern name,
- When the pattern is identified,
- Pattern length on bars/candles,
- Overall quality assigned to the pattern (arithmetic average of different quality indicators),
- The type that indicates whether the pattern is developed or completed, or whether it is a breakout or an approach.
- Number of candles since the pattern was defined (age).

This list is sorted by Quantity in candles (i.e. the number of candles/bars formed after the pattern was identified).

This sorting method means that longer duration patterns of 1 day and 4 hours will move down the list at a slower pace than shorter duration patterns (15 minutes, 30 minutes).

It also means that the user is assured that the “most recent” patterns will appear at the top of the list.

(For a more detailed explanation of the difference between completed and developed patterns, see Chapter 4, “Comparing Developed and Completed Results.”)



Results Pane: Expired Trading Opportunities

To view this pane, click on the “Expired Opportunities” tab and it will be highlighted in dark grey. This pane displays the results that were highlighted in the Search Pane and ended.

Exchange	Symbol	Interval	Pattern	Identified	Quality	Type	Length
FOREX	EURNZD	15 Min	Triangle	01-31 09:15	★★★★	Emerging	185
FOREX	NZDJPY	15 Min	Triangle	01-31 09:15	★★★★	Emerging	27
FOREX	USDCHF	60 Min	Triangle	01-31 09:00	★★★★	Emerging	47
FOREX	USDCHF	30 Min	Triangle	01-31 09:00	★★★★	Emerging	94

The duration of the result is completed as soon as an event occurs that makes the expected result impossible, or an event occurs when the expectation occurs and the goal is achieved. Examples of expired possibilities are when the price begins to consistently move away from the target level of a completed pattern or the completion of a developing pattern (in this case, the developed pattern ends but the completed pattern opportunity is created). See the examples below.





The information in this tab appears exactly the same as the information in the Active Trading Opportunities tab. See the previous section for details on what the results look like.

3. SECTION

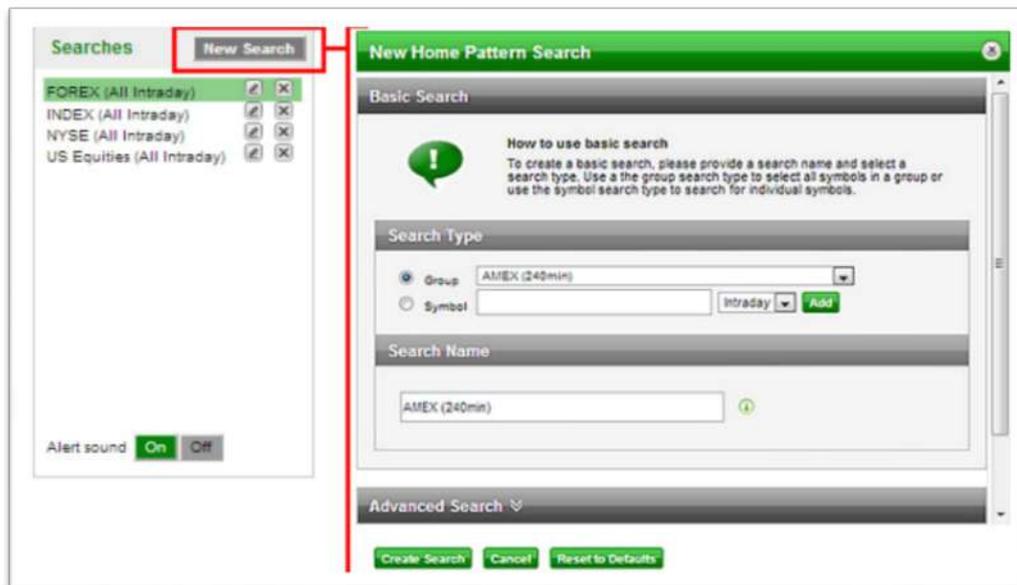
CREATING AND EDITING A NEW SEARCH CREATING AND EDITING A SEARCH CREATING AND EDITING A SEARCH

A search is a group of symbols predefined or selected by the user for which the user wants to find trading possibilities.

Each search binds a filter to the symbol selection that filters the results based on a set of advanced criteria . These are mentioned in detail in the section titled Advanced Search Filters below.

A search is a group of symbols predefined or selected by the user for which the user wants to find trading possibilities. Each search binds a filter to the symbol selection that filters the results based on a set of advanced criteria .

These are mentioned in detail in the section titled Advanced Search Filters below.



To start a new search, click the 'New Search' button at the top of the Search Pane (located in the upper left corner of the screen). The first thing you do to create your search is to identify the symbols you want to scan.

Basic Search (Selecting symbols/tools)

Basic Search function is also known as “Grouping”. Here the user can choose from a predefined group (usually symbols of a particular exchange or symbols of a particular time unit) or individual symbols to create a single portfolio .

In this section, users can select a Group of predefined symbols by selecting the “Group” option button and clicking on the drop-down list.



New Home Pattern Search

Basic Search

How to use basic search
To create a basic search, please provide a search name and select a search type. Use a the group search type to select all symbols in a group or use the symbol search type to search for individual symbols.

Search Type

Group
 Symbol

Search Name

AMEX (240m)

Advanced Search

- AMEX (240min)
- KCBOT (All Intraday)
- KCBOT (Daily)
- Korea (All Intraday)
- Korea (Daily)
- London Stock Exchange (240min)
- London Stock Exchange (30min)
- London Stock Exchange (60min)
- London Stock Exchange (All Intraday)
- London Stock Exchange (End-Of-Day)
- Metals (Futures) - All Intraday
- Metals (Futures) - Daily
- MGE (All Intraday)
- MGE (Daily)
- MICEX (All Intraday)
- MICEX (Daily)
- NASDAQ (240min)
- NASDAQ (30min)
- NASDAQ (60min)
- NASDAQ (All Intraday)
- NASDAQ (End-Of-Day)

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When a new group is selected, the search name is automatically set as the group's default name. The search name can be edited or expanded by the user at any time.

Search Type

Group
 Symbol

London Stock Exchange (All Intraday)

Intraday Add

Search Name

London Stock Exchange (All Intraday)

A red arrow originates from the dropdown menu in the 'Search Type' section, pointing to the 'Search Name' input field, illustrating the automatic population of the search name.



To search for special symbols, select “Symbol” from the option button, add the symbols you want (a complete list will automatically appear and update as you start entering the name of the Forex pair or other symbols.

Search Type

Group London Stock Exchange (240min)

Symbol Intraday

FOREX | USDCAD | USDCADIntraday

Note that the search name will automatically change each time to the most recent symbol added to your symbol list .

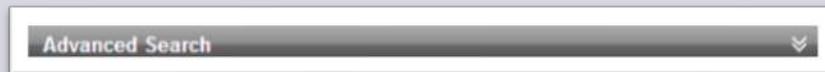
Search Name

At the bottom of the search window, you will see a text field where you can enter the search name. It automatically switches to the last group selected or the last symbol added to a custom list. A meaningful name must be given; just like you give a descriptive filename to an important document when saving it. The search name appears in the Search Pane. Once you have created a basic search, the last step to follow is to click the “Create Search” button at the bottom of the pop-up window.



Advanced Search Filters

To create an “Advanced Search” filter on a new or existing search, select the “Advanced Search” link located under the basic search options.



The Advanced Search screen will open with a list of additional criteria that will improve your search. You will see three separate tabs: Chart Patterns, Fibonacci Patterns and Key Levels.

criteria that will refine the search for each chart pattern, Fibonacci pattern or Base Level .

The selected tab appears in a lighter gray color; All filter criteria relevant to that type of analysis are changed as follows.

A screenshot of the Advanced Search filter interface. It features three tabs: "Chart Patterns", "Fibonacci Patterns", and "Key Levels". The "Chart Patterns" tab is selected and highlighted in a lighter gray. Below the tabs, there are two sections: "Price Range" with "Minimum Price" and "Maximum Price" input fields, and "Direction" with radio buttons for "Bull", "Bear", and "Bull & Bear". The "Bull & Bear" option is selected.



NOTE : Try not to make the advanced filter criteria too restrictive. Two or three criteria can be too limiting and the search can easily end up with an empty list of results. When you see the “No Patterns Found” message in the Results pane, make sure your search results are not too limiting.

Each list containing the search criteria will be examined in separate sections below.

Advanced Filters: Chart Patterns

Price Range

The image shows a screenshot of a software interface for setting price filters. It features a dark grey header with the text "Price Range". Below the header, there are two white text input fields. The first field is labeled "Minimum Price" and the second is labeled "Maximum Price". The interface is presented within a light grey rounded rectangle with a white border and a drop shadow.

This function is especially useful when scanning Stocks and CFDs. Users can define a minimum to maximum price range in the provided text boxes to limit stocks trading for less than \$1 or stocks that are too expensive.

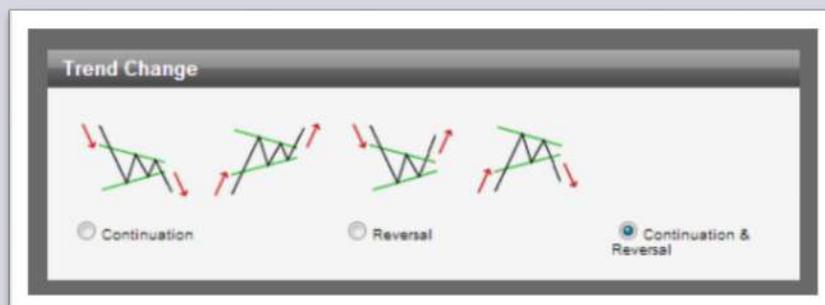


Direction



Search results can be filtered by the direction of the expected result in price movement once the pattern is identified. Each pattern has an upward or downward outlook. If you are only interested in a certain market direction, you can select that direction here by clicking the current option button.

Trend Change (Trend Change)



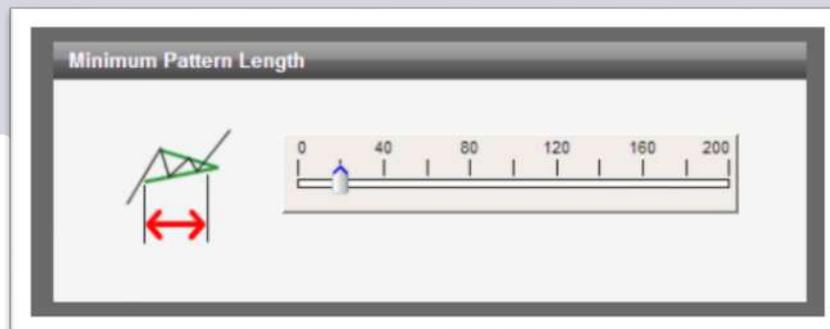
Once a Chart pattern is found, the expected price movement can be either in the same direction as in the Initial Trend or in the opposite direction. When after the pattern, the expected price movement follows the same direction as in



the Initial Trend, it is known as a continuation pattern. However, if it moves in the opposite direction of the Initial Trend, it is called a sudden change pattern.

Depending on the market's phase type (trending or sideways), you can use either continuation or reversal patterns. Here you can filter these patterns according to your preference by clicking the current option button.

Minimum Pattern Length



Pattern length is determined by the number of candles (bars) of the price chart included in the pattern. For example, on a chart with 60-minute bars, a pattern length of 30 means that the pattern was formed over 30 hours.

Longer patterns can be of much better quality, so you can choose from shorter patterns by using the slider and adjusting the minimum pattern length.

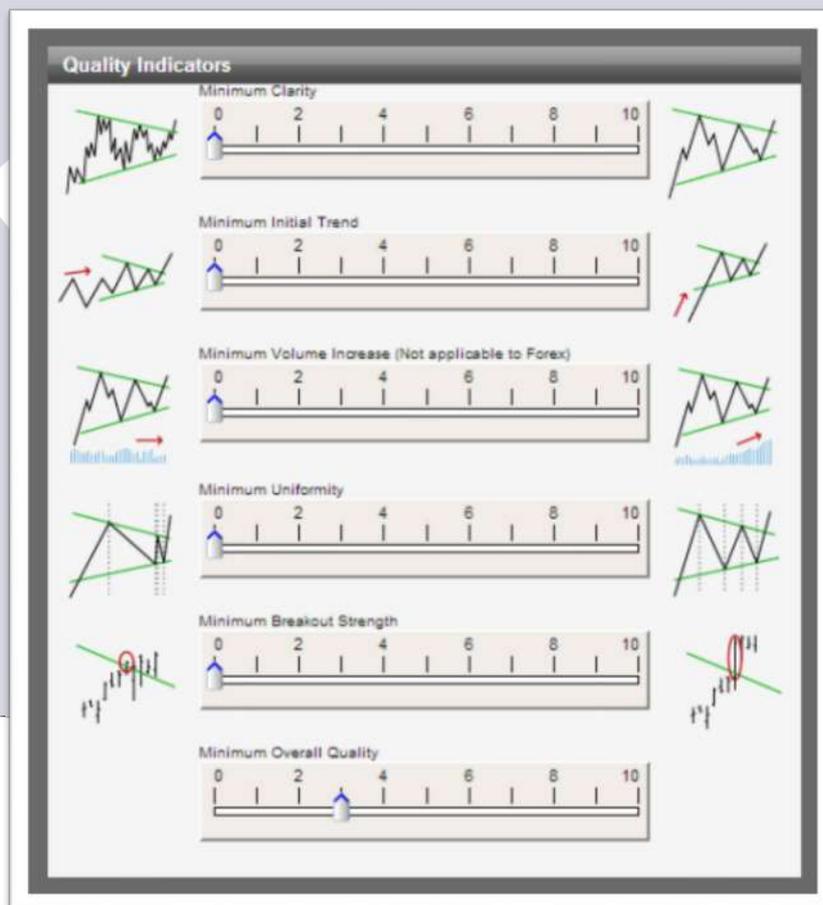


Chart Pattern Quality Indicators

Autochartist automatically classifies 5 objective indicators to measure Chart pattern quality: Clarity; Initial Trend; Volume; Uniformity and Breakout strength.

Quality indicators reflect the visual appearance of the pattern. A high-quality pattern will naturally look much more expressive, proportionate and symmetrical. The overall quality measure is the arithmetic average of all other indicators.

Quality is expressed as a number from 1 to 10, where 10 is the highest quality and 0 is the lowest quality. Use the sliders if you want to set desired levels of pattern quality for your search (see image below).





It is important to remember that the settings in this section determine the minimum requirements regarding quality. A lower threshold value may allow more patterns to pass the search criteria .

If the requirements are set too high, your search may return few or no results. If the quality indicator filters are set to zero, no results can be selected for quality and all results are returned.

Overview of Graphics Pattern Quality Indicators

Clarity: Shows the "noise" level on the price chart. If there are sudden increases in price movements, clarity will be low.

Initial Trend : The strength of the trend before a pattern is a very good measurement element that shows the visual quality of the pattern. A long and consistent Initial Trend will have a higher ratio on this indicator.

Volume : It is an important indicator used to measure a movement in the market. When markets get stronger, the price moves up or down. The perceived strength of the movement in question depends on the Volume of that period. The higher the Volume during that price move, the more pronounced the move. Volume applies only to exchange-traded instruments (stocks, ETFs).

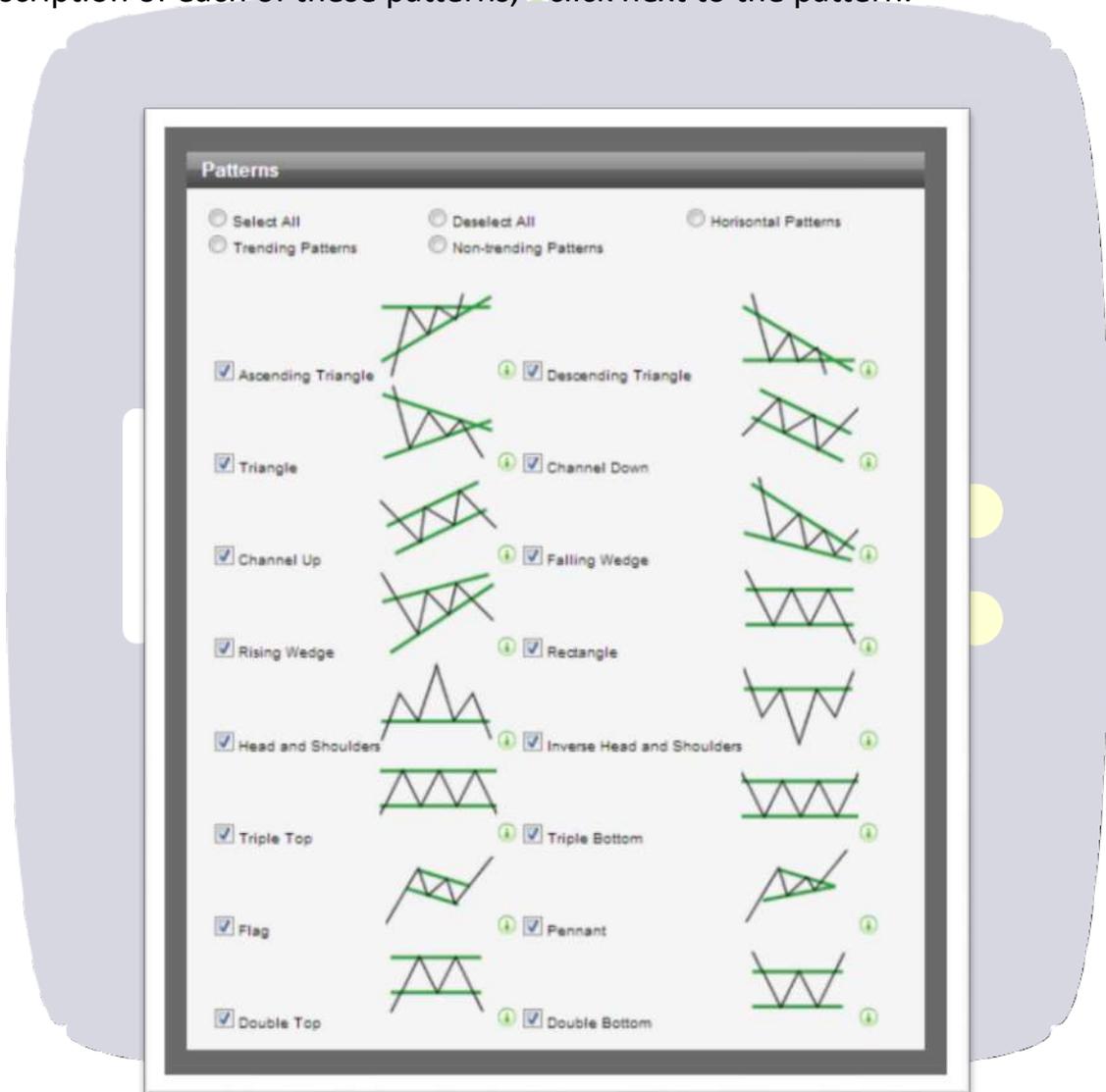
Uniformity : When the points touching the support and resistance lines settle more evenly over time, the pattern has a better Uniformity rate.

Breakout Strength : The speed at which the price breaks through support or resistance indicates the prominence of breaking the previous psychological level. The stronger Breakout supports the underlying theory and signals a higher probability of reaching the prediction region.



Chart Pattern Types

There are 16 different types of chart patterns defined by Autochartist. Any of these can be selected from the Advanced Filter section of a search. For a description of each of these patterns, [click](#) next to the pattern.





Advanced Filters: Fibonacci Patterns

Price Range

Price Range

Minimum Price

Maximum Price

This function is especially useful when scanning Stocks and CFDs. The user can define a minimum to maximum price range in the provided text boxes to limit stocks trading for less than \$1 or stocks that are too expensive .

Direction

Direction

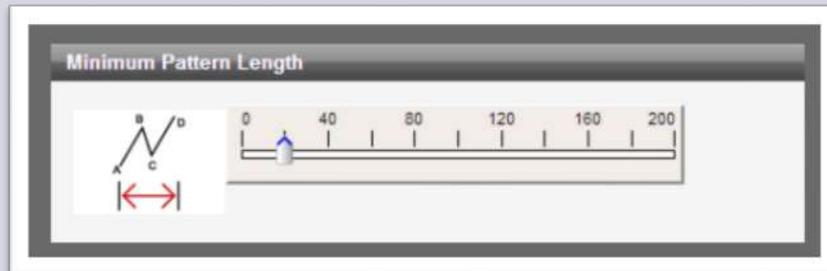
Bull Bear Bull & Bear

Search results can be filtered by the direction of the expected result in price movement once the pattern is identified. Each pattern has an upward or



downward outlook. If you are only interested in a certain market direction, you can select that direction here by clicking the current option button.

Minimum Pattern Length



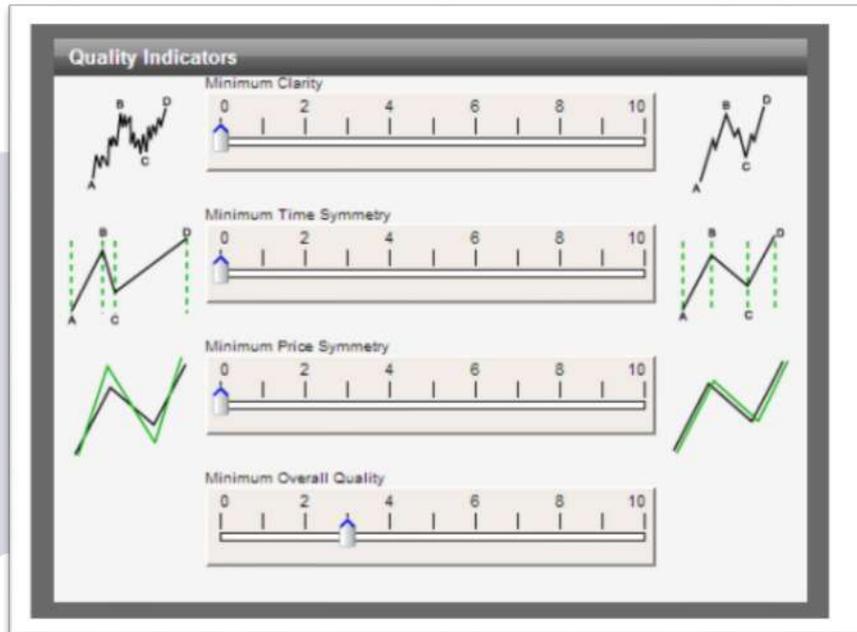
Pattern length is determined by the number of candles (bars) of the price chart included in the pattern. For example, on a chart with 60-minute bars, a pattern length of 30 means that the pattern was formed over 30 hours.

Longer patterns can be of much better quality, so you can choose from shorter patterns by using the slider and adjusting the minimum pattern length.

Fibonacci Pattern Quality Indicators

Three objective indicators measure Fibonacci pattern quality. Each Indicator is mentioned below. Quality indicators reflect the visual appearance of the pattern. A high-quality pattern will naturally look much more expressive, proportionate and symmetrical. The overall quality measure is the arithmetic average of all other indicators.

Quality is expressed as a number from 1 to 10, where 10 is the highest quality and 0 is the lowest quality. Use the sliders if you want to set desired levels of pattern quality for your search (see image below)



Clarity

It shows the “volume” level on the price chart. If there are sudden movements in price, clarity will be low.

Time Symmetry

The level where time differs at reversal points follows the same Fibonacci ratios found in price levels.

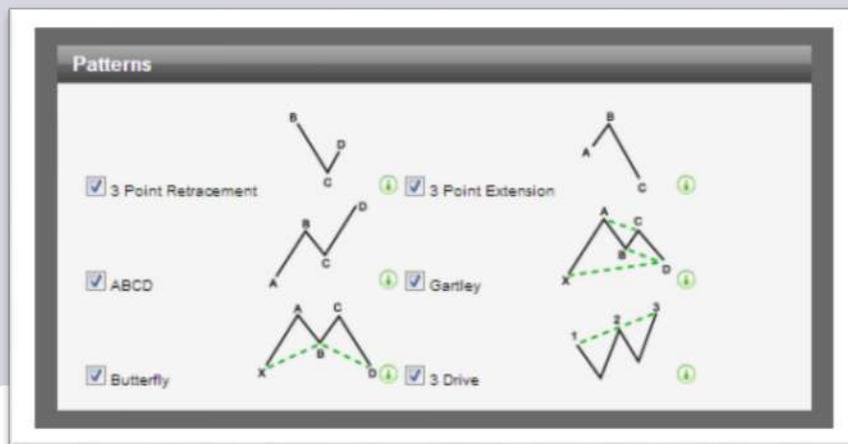
Price Symmetry

Price Symmetry is the level at which the defined rates match the theoretical Fibonacci rates within some margin of error. Therefore, the lower the margin of error, the higher the Price Symmetry.

Fibonacci Pattern Types



There are 16 different types of Fibonacci patterns identified by Autochartist. Any of these can be selected from the Advanced Filter section of a search. For a description of each of these patterns, [click](#) next to the pattern.



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BASIC LEVELS

Chart patterns, Fibonacci Patterns and Fundamental Levels as well as their specific search criteria are included. Each section is explained below.

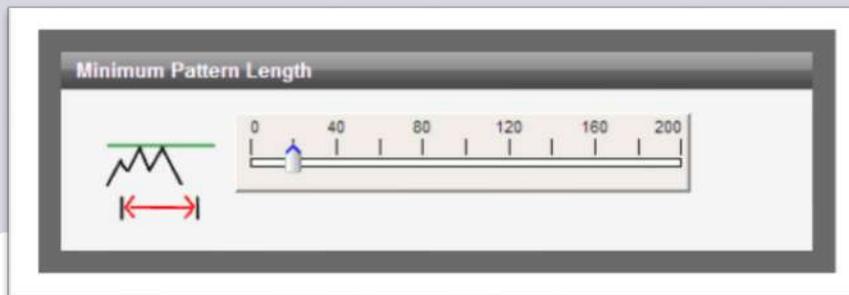
A screenshot of a "Price Range" filter form. It features two input fields: "Minimum Price" and "Maximum Price". The form is enclosed in a dark border.



Price Range

This function is especially useful when scanning Stocks and CFDs. The user can define a minimum to maximum price range in the provided text boxes to limit stocks trading for less than \$1 or stocks that are too expensive.

Minimum Pattern Length

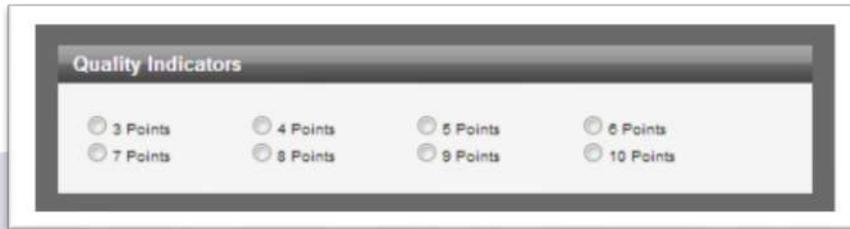


Pattern length is determined by the number of candles (bars) of the price chart included in the pattern. For example, on a chart with 60-minute bars, a pattern length of 30 means that the pattern was formed over 30 hours.

Longer patterns can be of much better quality, so you can choose from shorter patterns by using the slider and adjusting the minimum pattern length.

Quality Indicators

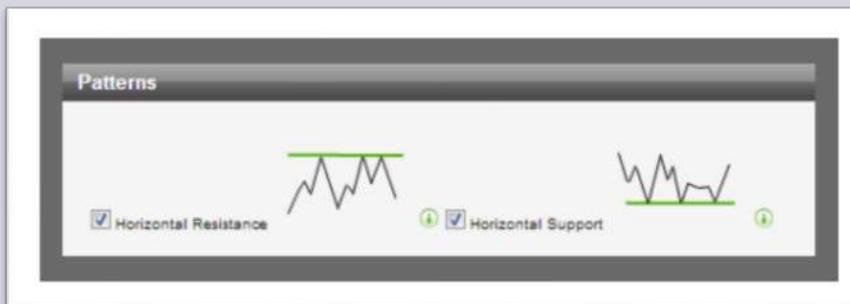
Base Levels have a single indicator that shows the importance of the Base Level. This shows the measurement of the number of points where the price chart touches and thus confirms the support or resistance level. More touchpoints mean that this support or resistance level is significant and if it is broken, we can predict strong price momentum.



Any Base Level has a minimum of 3 touchpoints by default, but option buttons allow the user to set a higher number of touchpoints of their choosing. Please note that the higher this filter is set, the fewer results will be displayed, although they will generally be of better quality.

Basic Level Pattern Types

There are only two types of Base Levels: Support and Resistance. Horizontal Support is a low price level that is tested and contacted from above. Resistance is an upward moving price ceiling touched from below.





4. SECTION

DEVELOPED GRAPH PATTERNS

It gives a brief overview of what it means to develop patterns and how they become completed patterns.

Improved Graphics Pattern



Developed chart patterns inform you about possible trading opportunities in advance. These are fully formed patterns that require the price to pass through support or resistance in order to be completed.

As soon as the price breaks through the expected support or resistance level, the developed pattern ends and a completed pattern is presented as a trading



opportunity.

However, most developed patterns are not completed, and this usually means that the price does not continue its movement towards support or resistance in cases where a breakout is expected to complete. If a new turning point occurs between support and resistance levels before exiting, the developed pattern ends.

The developed chart patterns are not useful for traders who want to know in advance that there is a breakout, but swing traders see the developed patterns as great trading opportunities, especially when the gap between support and resistance is wide enough.

Developed Fibonacci Patterns



The Fibonacci patterns developed are slightly more complex; because there is more than one hypothetical situation to complete the pattern.



The layout of the developed Fibonacci pattern is marked with a pink dot on the chart and has a theoretical final reversal point set at a certain price level. For the pattern to complete, the price must not only touch that level, but also find support/resistance at that level and break through in the opposite direction.

If the price does not reach or return to the target level, the pattern ends .

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